

A New Kind of Textbook for Twelfth Grade Social Science Classes

OUR ECONOMIC SOCIETY AND ITS PROBLEMS is a departure from the conventional textbook. It stands for a frank attempt to build those social and economic attitudes necessary for responsible citizenship in modern America. Note these points:

1. A central THEME—*Levels of Living and How They Can Be Improved*—ties the whole book together in a compact unit. How different this is from the typical abstract and unrelated classifications of Consumption, Production, Exchange, Distribution, Reforms!
2. Here is a SOCIAL approach to the study of economics, a drastic departure from the usual simplified college approach or the common money-making approach.
3. For WHAT COURSE? This book is intended for the senior high school course labeled "Economics," "Social Problems," "Problems of Democracy," "Social Science," etc.
4. Its AIM? To present a vital, realistic picture of social and economic America. Isn't this much more appropriate than an introduction to the conflicting theories of Adam Smith, Ricardo, John Stuart Mill on capital, wealth, interest, rent, money?
5. Here is a book strictly UP-TO-DATE. The commodity dollar, the Tennessee Valley Authority Act, NRA, public works, the Securities Act of 1933, unemployment insurance, laissez-faire, world debts, planned economy, AAA, chain stores, advertising—these problems and many others are all discussed in their proper places and discussed from the standpoint of their effects on levels of living.
6. There are 231 ILLUSTRATIONS. 131 of these are half-tones, drawings, cartoons; 46 are statistical tables; 54 charts and graphs. The usual book has around 100 illustrations only.
7. Facts and figures on the DEPRESSION years are given along with data on the years from 1900 to 1929. For example, there are 42 citations alone from *Recent Social Trends in The United States: The Report of President Hoover's Research Committee on Social Trends* (1933).
8. AGRICULTURE, a basic industry, is given its share of attention for the first time in a high school textbook. (See Chapters IV, VI, IX, and XVIII.) In other books agriculture is scarcely considered except for a few pages on commodity markets.
9. A correlated READING PROGRAM is provided. The Classroom Library idea is explained on the page following the Preface.
10. Here is a TEACHABLE book. The central theme makes for a unified course; the Classroom Library is a distinct aid. Note, too, (1) the introductions on pages 39, 135, 245, 377, 429, 457 and 485 entitled "Looking Backward—and Forward," (2) the very excellent study suggestions at the end of each chapter, and (3) the glossary.

This is a first edition. It was mailed to you direct from the bindery on the day of publication. It is one of the first 2,000 copies printed.

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Usual School Discounts

Our Economic Society

AND ITS PROBLEMS

A Study of
AMERICAN LEVELS OF LIVING
AND HOW TO IMPROVE THEM

by

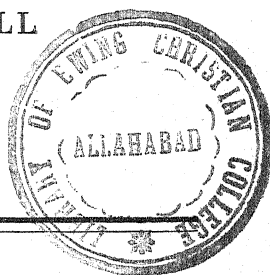
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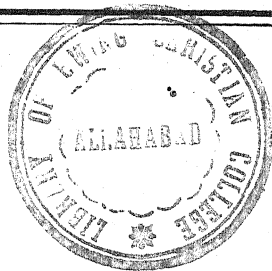
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Preface



THIS book has been in the making for nearly ten years. The actual writing and rewriting of the volume has been going on since the early part of 1931. We hope, therefore, that the book will be accepted as an earnest, painstaking, and thoughtful attempt not only to explain our economic life to students, but also to help establish in them economic and social attitudes necessary to fulfill the responsibilities and duties of a citizen.

The events of recent years have brought home to all thoughtful Americans the need for vitalized and practical instruction in the nature and problems of our common economic life. Opinions vary concerning the causes of and the remedies for the depressions and disasters from which the country has suffered from time to time, but all well-informed persons agree that general ignorance of elementary economic facts and principles has been a contributory factor of prime significance. If we are to escape from the evils inherent in low levels of living and if we are to solve the problems of unemployment, poverty, capital and labor, and the effective coördination of our productive agencies, we must inculcate in our young people a keen interest in, and an intelligent grasp of, the fundamentals of our economic society and its problems.

To stimulate such an interest and to contribute toward such an understanding are the main purposes of this book. Accordingly the volume opens with a survey of the historical background of our economic life, after which a detailed and concrete picture of our present levels of living is given—instead of the usual analysis of classical economic concepts. Ways in which the existing levels can be raised by increased efficiency in production on the farm and in the city are next described. As vitally related to economic welfare, the rôles of organization, management, and finance in the operation of our business

system are then discussed. The part that may be played by a reëvaluation of the distributive process is not neglected. This is followed by a careful consideration of the effects upon the levels of living of the uses of income. The importance of the promotion of international coöperation as a means of bettering human life is then stressed. Finally, a number of steps and proposals for improving our economic system are described and considered. In selecting the proposals for treatment, we have not been bound by the traditional list of remedies. We have sought to focus student attention not upon names, but upon what seem to us to be the significant tendencies arising out of the present world crisis. From beginning to end emphasis is placed upon the levels of living and the means by which human welfare may be advanced.

No pains have been spared to provide the volume with adequate teaching equipment. The illustrations have been chosen to depict economic activities and to portray conditions of working and living. Tables, graphs, and charts have been included in unusual numbers to illuminate social tendencies and to present significant economic trends and developments. Questions and problems for study have been prepared to awaken thought, to call attention to elements of especial importance, and to arouse fruitful discussion. A Class Library of twelve titles, to which constant reference is made throughout the volume, has been suggested.

Recognizing the truth that the world we live in is a world of change, we have attempted to present our economic order as one that has undergone and is continually undergoing changes. We have tried to differentiate sharply between *means* and ends, between *purposes* and agencies, in all instances endeavoring to subordinate instrumentalities and stress *goals*. We have aimed to avoid dogmatism, and to awaken thought. We have sought to bring about an awareness of the existence of problems, not to solve them. Our book, in short, is to be regarded not as an end, but as a beginning. If it becomes of service in enabling young people to understand the nature of our economic society and arouses in them an appreciation of, and an interest in, the economic problems by which they are surrounded, if above all it stirs in them a desire to contribute to the making of a better economic order, it will accomplish its purpose.

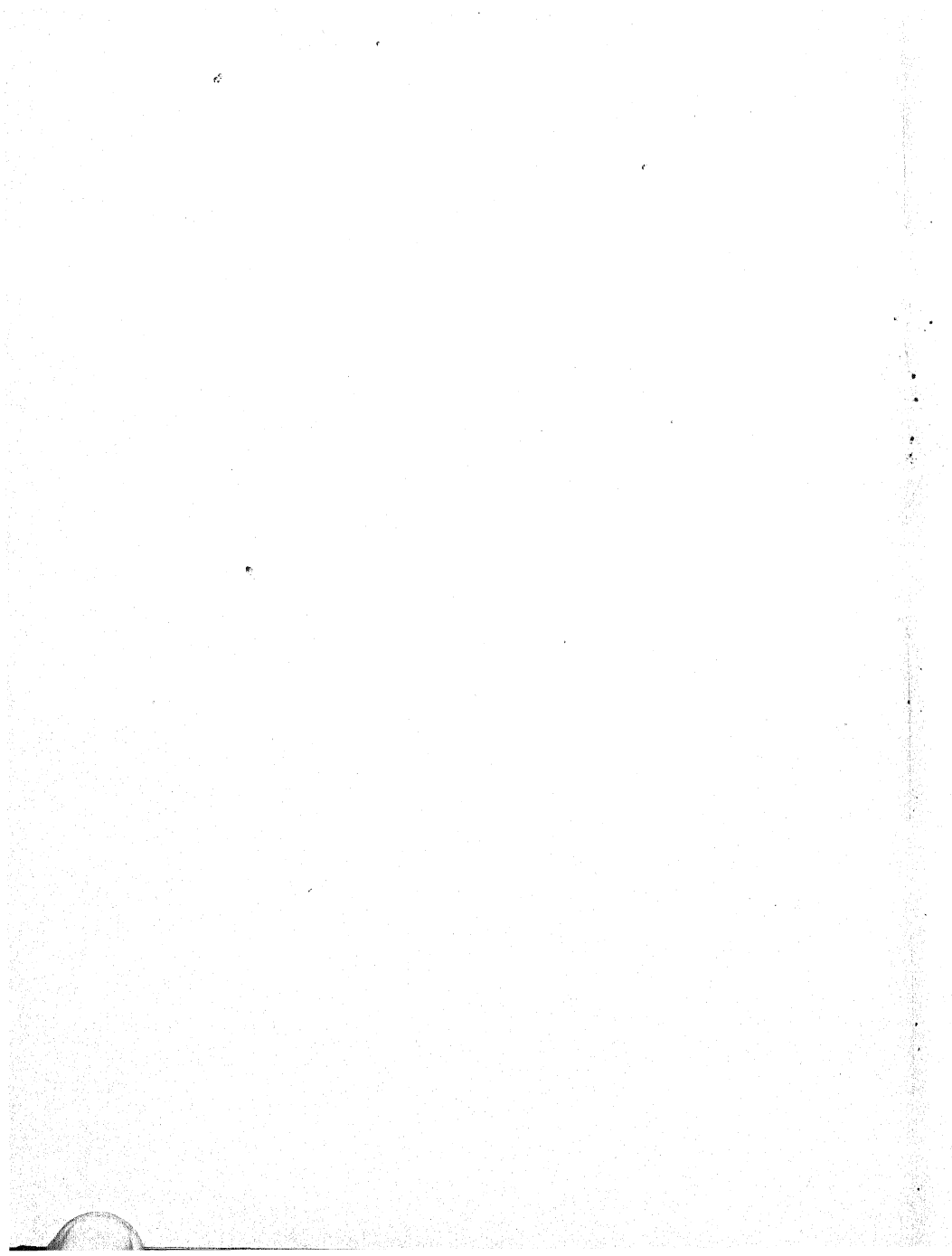
It is a pleasure to record here our thanks for the assistance given us by Elmer Ellis of the department of history of the University of Missouri; Andrew S. Haines of the South Philadelphia High School for

Boys; Horace Kidger of the Newton High School, Newton, Massachusetts; and R. J. Langstaff of the Scott High School, Toledo, Ohio.

We wish also to acknowledge our debt of gratitude to Thomas Munro of Western Reserve University and to Roy E. Stryker of Columbia University, co-authors with Rexford G. Tugwell of *American Economic Life*, out of which developed the plan for this new book, and on which we freely drew for material.

H. C. H.

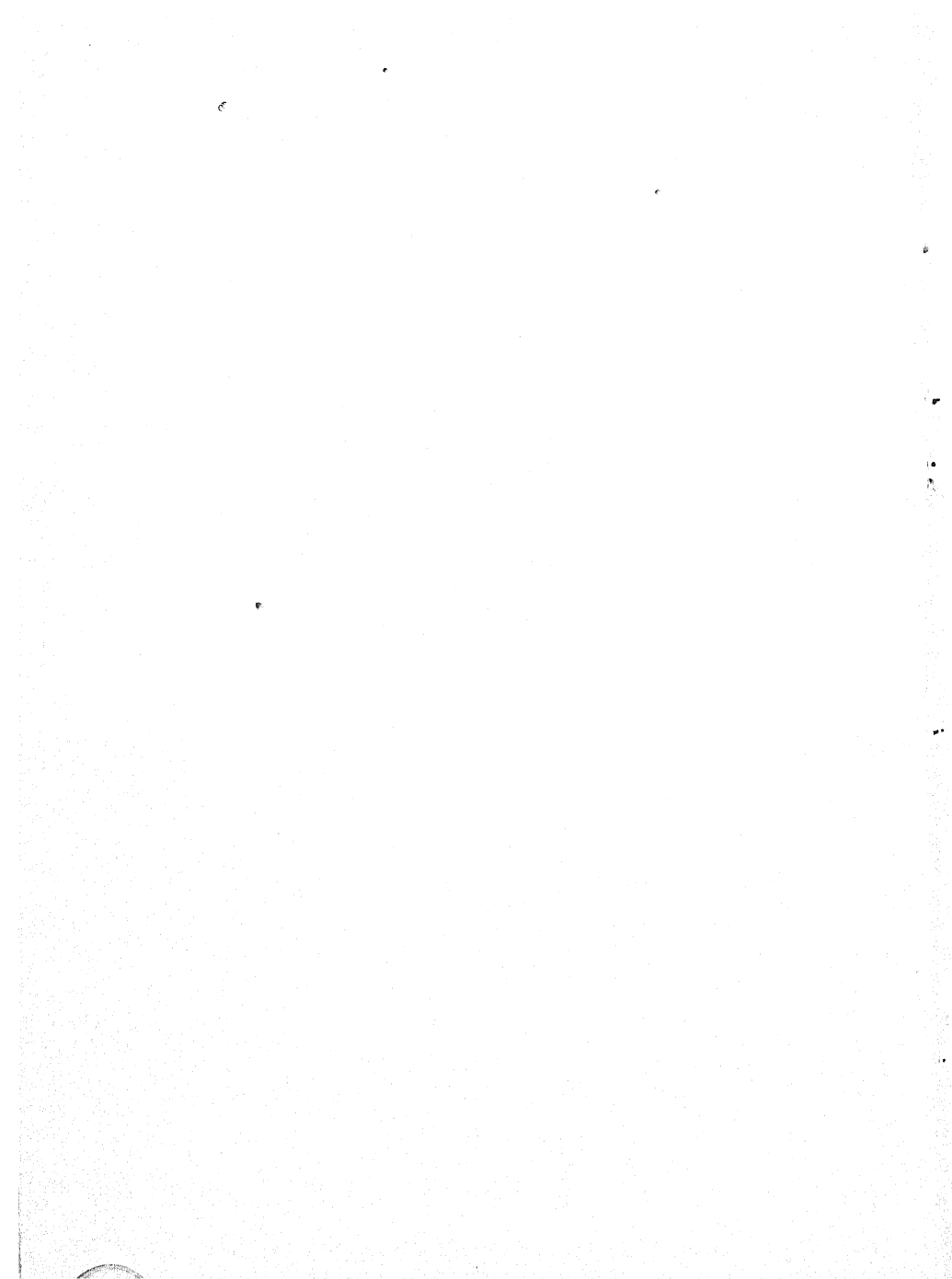
R. G. T.



Class Library of Twelve Books

THE books listed below have been carefully selected from a large number of volumes, to supplement the material in this textbook. At least one copy of each title—better, two or three copies—should be at hand for the students. Specific citations to these titles will be found at the ends of the chapters of the volume.

1. Bogart, Ernest L., and Thompson, Charles M., *Readings in the Economic History of the United States*, Longmans, Green and Company, New York.
2. Center, Stella S., *The Worker and His Work*, J. B. Lippincott Company, Philadelphia, 2d ed.
3. Chase, Stuart, *Men and Machines*, Macmillan Company, New York.
4. Clay, Henry, *Economics: an Introduction for the General Reader*, Macmillan Company, New York.
5. Forman, S. E., *Sidelights on Our Social and Economic History*, Century Company, New York.
6. Hart, Albert Bushnell, *Twentieth Century United States, 1900-1929*, Macmillan Company, New York. (*American History Told by Contemporaries*, Vol. V.)
7. Hayward, William R., and Johnson, Gerald W., *The Story of Man's Work*, Minton, Balch and Company, New York.
8. Hill, Howard C., *Readings in Vocational Life*, Ginn and Company, Boston.
9. Marshall, Leon C., and Wiese, Mildred J., *Modern Business*, Macmillan Company, New York.
10. Patterson, S. Howard, and Scholz, Karl W. H., *Economic Problems of Modern Life*, McGraw-Hill Book Company, New York.
11. Weld, William E., and Tostlebe, Alvin S., *A Case Book for Economics*, Ginn and Company, Boston.
12. Wells, H. G., *The Work, Wealth and Happiness of Mankind*, Doubleday, Doran and Company, Garden City, New York, 2 vols.



Part One

THE STORY OF OUR ECONOMIC SOCIETY

A Forward Look

FROM the beginning of time human beings have striven to improve their living-conditions. They have not always agreed on what makes improvement, but despite their differences of opinion they have with rare exceptions endeavored to better their supply of food, clothing, shelter, and the comforts and refinements of life. It is with such endeavors and the problems relating to them that this book deals.

Human efforts to raise levels of living have varied greatly at different times. In the ancient world the work in both shop and field was done largely by slaves. As the centuries passed, however, slavery gradually declined, and in its place, during the Middle Ages, serfdom and free labor developed. The land, which was divided into estates called manors, was cultivated for the most part by serfs, who were bound to the soil and who therefore could not be bought and sold like slaves. In the towns labor was generally free, but the workers, if engaged in skilled labor, were controlled by the craft guilds composed of the master craftsmen.

The level of living in the ancient world was enriched by the growth of commerce. During the disorders that attended the decline of Roman authority, however, the roads decayed and commerce practically came to an end. In consequence, the manors became largely self-sufficing. Several hundred years later commerce revived, the use of money was renewed, farming was revolutionized, and the manor and the gild gradually disappeared.

Out of the break-up of the manorial system came changes which contributed to the development of the domestic system of industry. Under this system manufacturing centered in the homes of the workers, although the raw material, particularly in the textile industry, was generally supplied by capitalists, who employed the workers to turn it into finished products.

During the eighteenth century the invention of a series of marvelous labor-saving machines brought about the Industrial Revolution, which ushered in the economic society of which we are members. The enormous increase in output made possible by the new machines ended the danger of famine and want so far as man's productive capacity is concerned, but the new industrial system brought about conditions that have seriously affected levels of living and at the same time have presented difficult problems that are still unsolved. The story of the development of our economic system is told in Part One.

Chapter 1

ECONOMIC LIFE IN ANCIENT TIMES

SLAVERY IN THE ANCIENT WORLD

The economic life of ancient Greece and Rome, as well as that of the other great civilizations of the past, was founded upon slavery. The land was owned by a few great proprietors, and labor was supplied by the numerous slaves captured in war and by their descendants.

Good Points about Slavery. In those far-away times, slavery was not wholly evil. It marked an advance over the earlier practice of ruthlessly killing captives taken in war. When people realized that their enemies could be kept alive and made to work for them like farm animals, they began to treat the conquered as well as they treated live stock. Some owners even learned that it paid to keep their slaves healthy and contented. Under a kind master the lot of a slave was not bad from the standpoint of animal comfort.

Most of the magnificent contributions of the ancient world to the arts and sciences would

have been impossible without the wealthy leisure class which the slaves supported. The slave system made possible the pyramids of Egypt, the temples and statues of Greece and Rome, the poems



Egyptian slaves making sun-dried bricks with Nile mud and straw. (From a wall painting made about 1500 B.C.) Were the palaces of ancient times worth this back-breaking labor with crude tools? Notice the overseer who sits by with a heavy stick, often with a knotted lash or a piece of metal on its end. (Courtesy Metropolitan Museum of Art.)

and dramas of the ancient writers, and the foundations of modern science.^f In addition, some free men, although they scorned physical labor, turned from idleness and war to problems of management and direction, and thus developed a system of discipline, steady work, and skillfully allotted duties.

Evils of Slavery. A productive system based on slavery, however, meant abject suffering for millions of people throughout many centuries. For if the results of slavery are measured in terms of human life, the outstanding fact is the extreme inequality between the upper and the lower classes. The former enjoyed all the leisure and luxuries; the latter labored, often in misery, and consumed as a rule only such goods as would sustain life.

The unthinking part of the free population tried to justify slavery by saying, "To the victor belongs the spoils." The greatest philosophers of ancient times maintained that there was a *natural* slave class of mentally inferior persons, incapable of doing anything except the most menial tasks. Of course, such thinkers could never disprove that many able people were among those who were unfortunate enough to be born of slave parents or to be captured in war, and that many free men had little ability of any kind. Today we feel that slavery is morally wrong.

Slavery was also inefficient. It acted as a barrier to education and initiative among the lower classes. Since slaves were cheap, there was little or no incentive to invent labor-saving machinery. The primitive hand-tools for tilling the soil and for making weapons, pottery, and rough textiles used by one generation were handed down to succeeding generations without thought of change. The free man contributed little to the production of wealth, because he thought it more fitting that he should engage in war and sport, or in discussion, literature, and art. Thus the institution of slavery discouraged efforts to discover the more efficient mechanical methods which have now made slavery so unnecessary.

LIVING-CONDITIONS IN THE ANCIENT WORLD

Work and Treatment of the Slaves. Most of the slaves in the ancient world were white. Those who worked as domestic servants were usually treated as subordinate members of the family. They shared in the food of the household and in time of sickness were

generally cared for by their mistress. They looked after the house, prepared the food, laundered the clothing, and took care of the children.

In addition to the domestic servants, there were other slaves who worked in the potteries, as artisans in the shops, and as miners in the quarries and the silver mines. The large majority of the slaves, however, toiled on the farms as plowmen, herdsmen, and workers in vineyards. Most masters treated their slaves well so long as the slaves behaved themselves and were industrious. The masters had complete authority over the slaves, and on occasion punished them with the rod and even branded them with a hot iron upon the forehead if they proved troublesome and obstinate.

The lot of the slaves on a Roman plantation, however, was very hard. During the day they were forced to toil long hours in the fields at back-breaking tasks and at night they were herded into damp, unsanitary sleeping quarters in dark underground prisons. Always in fetters and frequently flogged by brutal keepers, the plantation slaves no doubt often longed for death to relieve them from their misery.

Houses. The level of living in the ancient world varied at different times and among different classes. In both Athens and Rome the houses of the poor were often mere huts, dark, smoky, squalid, and overcrowded. Citizens somewhat higher in the scale had humble homes, often used partly for dwelling purposes and partly for shops. Even the better dwelling-places were usually small and for the most part simple in construction and modest in furnishings. Only the rich and powerful enjoyed mansions or palaces.

None of the residences had conveniences that we generally accept as matters of course. Bathrooms, water piped into the house, and sanitary arrangements were unknown. At night a dim olive-oil lamp provided the only light for the household. The dwelling had no chimney and the smoke from the kitchen fire found its way as best it could out of a hole in the roof or through the open door. The floors



Primitive hand tools were used to dress blocks of stone. (From an Egyptian tomb of about 1500 B.C.) These slaves were never interred in the mausoleums built for their masters. (Courtesy Metropolitan Museum of Art.)

were of dirt, covered with pebbles and small shells. When such unattractive living-quarters are kept in mind, it is easy to understand why both Greeks and Romans spent most of their waking moments out of doors.

Clothing. Compared with the dress of today the clothing of most of the citizens in ancient Greece and Rome was simple and inexpensive, even the attire of the women as a rule being in no way elaborate or costly. In Greece, for example, the men generally wore only two garments, the mantle and the tunic, and on many occasions wore only one of these. The two garments, usually made of woolen cloth, were oblong or square in shape and were wrapped loosely about the body. The tunic of a workman or slave was composed of the coarsest fabric; it had a single armhole, the left, but no sleeves—the right arm and shoulder were entirely free, the tunic coming around beneath them and falling just above the knees. The mantle, which was draped about the body, fell to the lower part of the shins. The feet were protected by sandals, shoes, or boots, although many citizens as well as slaves went barefoot even in the winter. Covering for the head was generally regarded as unnecessary.

Food. The food of the ancient Greeks and Romans in many ways resembled our own, although they knew nothing of potatoes, tomatoes, corn, tea, coffee, sugar, oranges, and bananas. Canned goods of course were unknown. The limited diet of the poor consisted generally of barley cakes, a few vegetables such as onions or cabbage, and a supply of olive oil and wine; they seldom tasted white bread or fresh meat. Citizens with larger incomes enjoyed a wider selection of foods, including poultry, mutton, pork, fish, a variety of vegetables, fruits, sweetmeats, and an assortment of wines. Domestic servants shared the food of the household, while rural slaves generally existed on a plain diet of barley porridge, coarse bread, and salt fish. Except in time of war or famine few people suffered from lack of food.

COMMERCE

Trade Beginnings. Commerce played an important part in the ancient world in raising the levels of living, especially of the upper classes. Military empires, established first by Babylonian and Assyrian generals, and then by Greek and Roman conquerors through wider and wider areas, broke down local barriers, opened new trade territories,

and enriched life by introducing commodities previously unknown or inaccessible. The conquests of Alexander the Great in particular introduced Oriental and Mediterranean peoples to each other and gave them a taste for exchanging products. Julius Caesar's conquests in Britain were a natural preliminary to the shipment of tin from the mines of Cornwall back to Rome.

The Roman Empire Fostered Commerce. So long as the Roman Empire controlled Gaul and the Mediterranean world, the roads of commerce lay open. Wherever the Roman legions reached, they preserved order, which enabled law-abiding farmers and craftsmen to produce in safety the goods of trade. Merchants received protection while traveling back and forth, exchanging fine merchandise from Greek and Roman cities for the metals, marbles, hides, lumber, and foodstuffs of the outer world.

Development of Finance and Money. Since the ancient world was marked by far-reaching commercial interchange, it developed a considerable number of financial agencies and devices.

Under the Roman Empire the gathering of taxes from subject peoples and the payment of expenses for road construction and government necessitated an elaborate financial system. Most important of all, trade among points that were long distances apart made it impossible to continue the primitive method of *barter*, which is the direct exchange of goods for goods. Instead, a monetary system grew up, involving the use of tokens or coins and the fixing of the



Barter, the only form of trade in ancient Egypt. Would you like to carry fishhooks instead of quarters, or to calculate how many fishhooks are worth how many beads? (Courtesy Metropolitan Museum of Art.)

price of goods in terms of these coins. *Credit*—the practice of securing goods at one time and paying for them at a later time—was also used.

Specialization and the Growth of Cities. The exchange of goods among various regions increased specialization in particular products. Since exchange made it no longer necessary for one locality to pro-

duce all the goods which it needed for consumption, each locality concentrated upon the goods which it could produce with the least effort, and exchanged them for commodities produced in other localities. Large cities were populated with people engaged exclusively in commercial and manufacturing pursuits. A new class developed, which enjoyed social privileges based upon the ownership of instruments of production; this class ranked between the landowning nobles and the agricultural laborers.

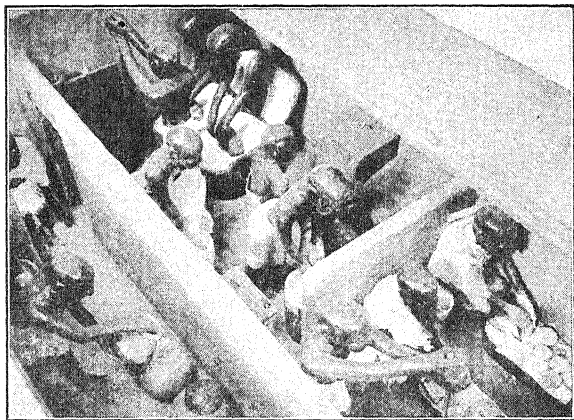
Exchange of Ideas and Cultures. Commercial interchange has always been accompanied by the spread and mixture of different cultures. The struggle for ascendancy among historic civilizations has been as much a conflict of ideas and customs as a clash of arms. In fact, the exchange of cultural systems has been going on since a period so early that scholars find it very difficult to discover the original habitat of certain practices, or to determine whether the practices developed independently at various places. We do know that ancient Rome dispersed its customs far and wide, and that Rome in turn was influenced enormously by contact with the rest of the known world.

COMPARISON OF THE ANCIENT AND THE MODERN WORLDS

Similarities. The ancient world came to have an economic system resembling ours in many respects, such as specialization, commerce, and the division between industrial and agricultural enterprises. Of course, all of these activities existed on a much less complicated and less extensive scale than that with which we are familiar.

Dissimilarities. The most striking difference between the ancient world and our own times, however, lies not in commerce or in labor, but in levels of living. During the ages when military ruthlessness held full sway, military empires widened the distance between the level of living of the owning class and the level of living of the working class to an extent far greater than we should willingly tolerate today. The slave system established an almost impassable economic and social obstacle preventing individual progress, whether based upon merit or upon chance, from one class to another. The slave system also kept down the level of living of the working class by discouraging the invention of such labor-saving machinery as would enable workers to be more productive and to enjoy more leisure.

Finally, the ancient world made economic progress only by accident. It did not strive for or definitely attempt to plan out means of increasing the productive capacity of society as a whole, and thus to



Household slaves making bread. (From ancient models illustrating daily life in Egypt; now in the Metropolitan Museum of Art, New York City.)

raise all levels of living. Nor did it seek to progress toward a condition in which, as time passed, such leisure and comforts as were known might be enjoyed by an ever increasing number of the population.

SUMMARY

Slavery was the basis of economic life in the ancient world. It led to accomplishments by a leisure class, but kept the vast majority of the people in abject want. Slavery was economically wasteful and inefficient because it did not stimulate improvements in wealth production. Living conditions for most of the people were very low: food was plain, clothing was coarse, and houses were often mere hovels. For most slaves and laborers, hours of toil were long and back-breaking. The Roman Empire developed commerce, and as a result there grew up monetary and financial systems, specialization, and city populations. The ancient world differed from ours chiefly in its lower level of living and in its deficient ideas of economic progress.

QUESTIONS AND PROBLEMS

1. Everything that satisfies our wants is the result of human labor. Point out as many exceptions to this statement as you can. Is labor more important than land? Explain.
2. Describe the system of labor that existed in the ancient world. Compare with the labor system in our own country today.
3. How did the institution of slavery hinder industrial progress in ancient times? Did slavery have a similar influence in the United States before the Civil War? Give evidence that supports your opinion. See E. L. Bogart, *Economic History of American People* (Longmans, Green and Co.), 1930, pp. 459-67.
4. How did slavery help to advance civilization in early times? Did it promote civilization in the South before 1860? From the economic viewpoint, is slavery superior to free labor? Why is slavery morally wrong?
5. Explain three ways in which the conquests of the Greeks and Romans affected ancient commerce.
6. Tell how commerce promotes specialization. Does it increase interdependence? As used in the two preceding questions, what do the words *specialization* and *interdependence* mean?
7. Was the ancient world more highly specialized than the modern world? Was it more interdependent? Give evidence for your answers.
8. Point out three ways in which the ancient economic world was like ours; two ways in which it was different.
9. In your opinion what feature or aspect of our economic life would be most surprising to Alexander the Great or to Julius Caesar? What feature of the economic life of the ancient world surprises you most?

READINGS IN THE CLASS LIBRARY

The references that follow are from the Class Library given on page ix. Especially interesting or illuminating citations are indicated by stars.

- *1. "Man's Conquest of Nature's Powers," Marshall and Wiese, *Modern Business*, pp. 5-16.
- *2. "Man's First Tools," J. H. Breasted, Hill, *Readings in Vocational Life*, pp. 21-26.
- *3. "Machines of the Ancients," Chase, *Men and Machines*, pp. 42-60.
4. "Victories of Primitive Man," Hayward and Johnson, *The Story of Man's Work*, pp. 8-25.
5. "Work in Ancient Days in the Near East," *ibid.*, pp. 26-46.
6. "What We Owe the Greeks," *ibid.*, pp. 53-58.
- *7. "How Man Became an Economic Animal," Wells, *The Work, Wealth and Happiness of Mankind*, Vol. I, pp. 41-52.

Chapter 2

ECONOMIC LIFE IN MEDIEVAL TIMES

BETWEEN ANCIENT AND MEDIEVAL TIMES

The Dark Ages. The Dark Ages, as the period in Europe between the seventh and the tenth centuries is called, completed the destruction of the economic system of the ancient world, a destruction that had begun long years before. During these centuries the whole countryside was raided continually, first by hordes of barbarians and later by descendants of these same barbarians roughly hammered together into small armies by chiefs who were little better than robber bandits.

Under such conditions there was little settled ownership of property and still less regular intercourse among regions. Here and there near the walls of a well-situated town, castle, or monastery, a small group might glean an uncertain living from year to year by gardening and cattle-raising. But the community lived always in the expectation that a ruthless raid might burn its flimsy huts, destroy its crops, and carry off its cattle during the night. Even slavery diminished, for life and property became so insecure that people found it hardly worth while to own slaves and cultivate the land. In consequence, the common practice of each leader in war was to butcher the miserable peasants clustering about his rival in order to prevent the latter from again becoming powerful or prosperous.

FEUDALISM

Feudal System United under Two Heads. A new social and economic structure, known as the feudal system, gradually arose

during the disorderly centuries that followed the collapse of the Roman Empire. This new system existed in western Europe between the tenth and the fifteenth centuries. To the people of these centuries, the *ideal* society had two distinct orders: one, the political organization, was headed by the Holy Roman Emperor; the other, the religious organization, was headed by the Pope. These two authorities were supposed to divide all powers between them—the Emperor having command over earthly matters, and the Pope over spiritual ones. From the Emperor downward was supposed to extend a gradual scale of nobles—including the kings of the various nations, the dukes, the barons, the lesser nobility—the townspeople, and at the bottom the serfs. From the Pope religious authority was supposed to extend downward through the various levels of the clergy.

Feudal System Decentralized in Practice. No king or emperor, with a few exceptions such as Charlemagne, was strong enough to exercise world-wide or even nation-wide authority. The feudal social organization actually began in the gradual formation of small groups about nobles who were strong enough to protect them. Thus a multitude of petty nobles, who theoretically owed loyalty to some king but who in practice were frequently strong enough and willing to defy royal authority, governed Europe during the Middle Ages.

Just as there was no central government, so there were no trade agreements, nor anything like a world-wide economic or commercial system. Life in all its aspects—social, industrial, and intellectual—was organized in small units, like islands on an ocean, each of which was a little world in itself, having slight contact with the rest of humanity.

THE MANOR

Self-Sufficiency of the Manor. With little intercommunication, medieval life gradually tended to center in groups that were largely self-sufficing. Of these the *manor* and the *gild* are the most important. The manor, which is an aspect of the feudal system, contained within itself almost all of the activities and products that were essential for human existence. It provided, in miniature, an organization covering the main necessities in any economic system.

The manors, which rested on an agricultural basis, varied in size

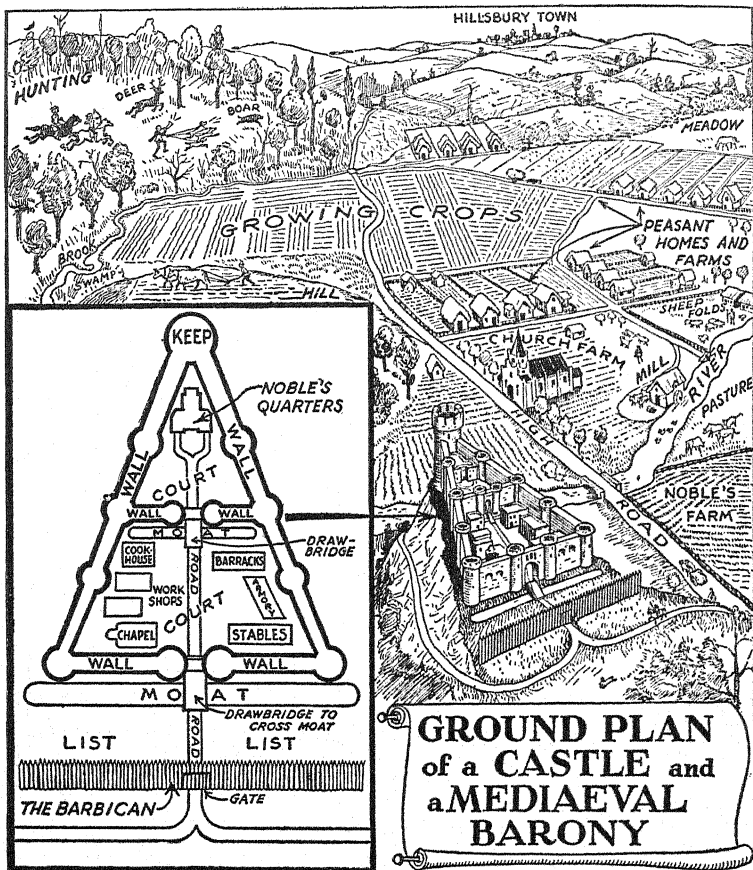
from 30 or 40 acres to over 10,000 acres, most English manors running from 500 to 1,000 acres. Within the tract of land which made up the manorial estate, a variety of foods was raised. In the little village which clustered about the manor house, or the castle of the lord, went on the activities required for a simple scale of living: spinning, weaving, the tanning of leather, the shaping of clothes and shoes, the churning of butter, the making of cheese, the brewing of ale, the baking of bread, blacksmithing, and carpentry. Products and services were exchanged among the residents of the manor, and the slight commerce of the time was carried on by direct barter, with little or no use of money.

Manorial Cultivation of Land. England before the eighteenth century was mainly rural, with almost nothing that really corresponds to our cities of today. Most of the towns were merely a few low houses clustered in narrow streets about a castle, a cathedral, a seaport, or upon a river bank favorable for trading. Nearly every family did something akin to farming and most families actually lived by and on the soil.

If a traveler in the thirteenth century could have had an airplane view of the country, he would have seen vast areas given over to forests and waste land, with here and there a cleared and settled tract. Near the center of each clearing he would have noticed a small group of buildings around which were several fields cultivated in a curious fashion. Instead of large fields devoted to a single crop, as in the wheatfields of our Middle West, he would have seen a patchwork of small strips, each consisting of from half an acre to an acre and each separated from the adjoining strip by parallel ridges of sod, or rows of stones and sticks, called balks.

If the traveler had watched long enough to follow the movement of any one laborer during a working-day, he would have observed the workman plow or cultivate one of the strips of soil between two parallel ridges. After a few hours of work this man, instead of cultivating the next strip, would gather up his belongings and go to a strip at some distance, perhaps in another field. Each of the laborers would act in like fashion. In most of the manors the observer would have noticed one large field which received no attention at all. This field was similarly striped, but was allowed to grow up in unchecked vegetation. He would have seen another large field devoted usually to the pasturing of animals.

What was the reason for the curious arrangement of farm land on the manor? It was a crude but effective plan for providing a fairly



The medieval lord was monarch of all he surveyed, but his vision was limited to a tight little system, isolated from the world by ignorance and fortifications. (Map by George Bell, from *Exploring American History* by Casner and Gabriel.)

equal division of land among the serfs and for maintaining the fertility of the soil. Each serf tended several strips, scattered about the manor, in order that the average quality of soil cared

for by each individual might be approximately the same. The large, untended field was lying fallow to renew its fertility after two years of cultivation. Without this precaution the land would have been quickly exhausted, for the people of the Middle Ages understood nothing of present-day practices of rotating crops or of scientific fertilization, which keep land in constant use without destroying its richness. Each year a different one of the three main fields which made up a typical manorial estate was thus left fallow.

Comparison of the Rights of the Slave and the Manorial Serf. The slave of the ancient world differed in several important ways from the serf of the Middle Ages. The slave could be bought and sold at will; he had practically no personal or property rights except those which his owner chose to allow him; he had no family life except by the permission of his master; and any duty could be exacted of him. The serf of the Middle Ages, on the other hand, could not be bought and sold away from the land on which he was born, since he was attached to the land rather than to any master and could be transferred only with the land; he had fairly well-defined rights as to family life and occupation, which were his by custom and tradition, although in practice the nobles often violated his rights without interference from outside. Some serfs had a hereditary right to certain strips of land; with other serfs the strips were reassigned at regular intervals.

Duties of the Manorial Serf. The serf owed certain duties to his lord in exchange for the protection which his lord owed to him. He was bound by custom to devote a regular portion of his time to working upon the lord's land, and was required to pay the lord certain dues out of the products of his own land. He had to use the bakery, the wine press, the weights and measures, of his lord, and was required to pay for their use instead of finding substitutes for them in his own home. In so far as rights were based upon power, the lord frequently made other more drastic demands upon the serf.

THE CRAFT GILDS

Industrial Work in Medieval Times. In order to understand the industrial system of the Middle Ages it is necessary to discard all ideas of standardized and subdivided factory methods,

and to imagine a product being made from start to finish in a given household. To take a simple illustration, we all know that today cloth and buttons are manufactured at different places and are then brought together and made into clothing. In medieval days, both undertakings were united under a single master craftsman.

The master craftsman of the Middle Ages was the head of an establishment which included not only his own family, but also a



The spur, wrought on the anvil by hand and tempered in a tub of water, was the final mark of the gentleman on horseback. Usually the craftsman did not follow the paper plans which guide the modern designer. (From Lacroix: *Manners and Customs*.)

group of *apprentices* to whom he taught his craft and a group of older and more experienced workers called *journeymen*. The apprentices were bound out by their parents to the master craftsman for a term of years. During that time they lived with him, received food and lodging, and submitted to his orders, being subject to recapture and punishment if they ran away. At the end of their period of instruction, after passing examinations to test their skill, they became journeymen. As such, they were free to go from place to place, or to set up their own shops if they were able to do so.

Craft Gilds. Within any large community all the master craftsmen in a particular trade came to an agreement in regard to prices, hours, and methods of work. In this way the various craft gilds exercised complete power over all the major occupations within a town, each gild controlling a single craft. Ruthless competition among individuals in the same town and craft was regarded as evil and unthinkable. In order to secure peace and prosperity for all, the craftsmen agreed upon a regular method of dividing up the business and of charging similar prices for similar products.

The officers of the gild, following custom closely, prescribed the weight of every loaf of bread, the breadth and thickness of every bolt of cloth, the exact specifications for the materials which went into every product, the tools to be used in their manufacture, and the

prices for which they could be sold. No member of the gild was permitted to introduce new methods of manufacture, or to act upon shrewd foresight and buy up for himself the total available supply of some necessary raw material. Finally, a stranger was not allowed to come into a community and practice a trade without first being admitted to membership in a gild.

Results of the Gild System. The gild system had both good and bad points. At first the gild rendered valuable services by securing coöperation, regular work, and a degree of individual security. Hard times might hit a town or nation, but the individuals in it sank or swam together. As industry became more prosperous and conditions more safe and stable, however, the craft gild outlived its usefulness. Its exclusiveness tended to shut out industrious and enterprising workers from outside the community. Craft regulations also acted to prevent individual initiative and originality. For generations new inventions and methods were impeded by the difficulty of getting the gild officers to approve anything new.

Working Conditions in the Gilds.

One is often tempted to look back with too romantic an eye on the life of the medieval craftsman, and to forget the many ways in which his work was hard and unprogressive. It is true, of course, that the making of a whole product, instead of specializing in the making of only one part of a product, developed a feeling of artistry that comes from doing a whole task well. But the work,

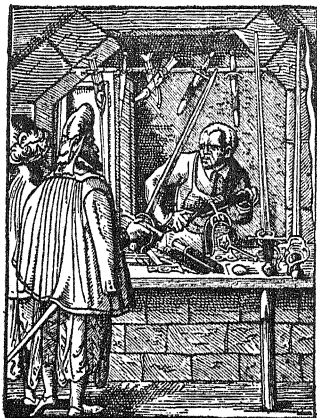
though not subdivided, was often highly standardized. Moreover, the medieval craftsman had to perform his tasks in the prescribed way and could seldom follow an individual impulse. The hours of work were long and arduous: from dawn to dark for apprentices, and scarcely less for the higher workmen if they wished to earn a comfortable living. Labor-saving devices were few, and hundreds



Compare these crude leather shoes with the polished slippers of today. Yet even they were a luxury—wooden shoes were more common, and the masses had no protective covering underfoot but straw bound with rags or the tough stalks of weeds. (From Lacroix: *Manners and Customs*.)

of steps, such as shaping boards or hammering out metals, had to be performed by back-breaking, monotonous drudgery.

Living-Conditions of the Workmen. In appraising the medieval workingman's life one must not forget the unsanitary conditions under which he and his family lived. Factory smoke and dust might be missing, but sanitation was unknown. Wells and streams were commonly polluted, and streets were the dumping-grounds of garbage and filth. As a result plague after plague swept over the whole of Europe. Buildings were made of wood, and vast fires, which might destroy in a night the savings of a lifetime, were frequent.



Working with rough tools and crude alloys, the artistic sword-maker produced a weapon that could glide very smoothly between an adversary's ribs. (From Lacroix: *Manners and Customs*.)

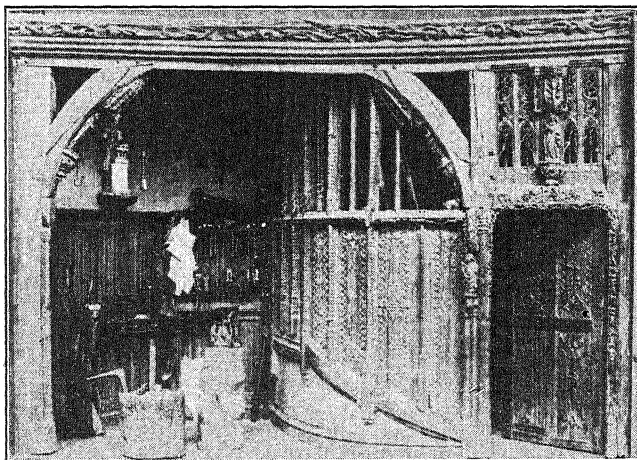
Food was plentiful one year and scarce the next; it was hard to preserve and at best was limited in variety to the products of the neighborhood. Refrigeration and the preserving of foods in cans and bottles were unknown. Milk, butter, and meat could be kept fresh for only a short time in the damp cellars available, while meat could be preserved only by drying or salting it. A direct consequence of the stale and monotonous food of the time was a strong desire for spices. Once formed, the taste for such luxuries led to commerce with the Orient, and eventually stimulated exploration to find new trade routes to the East. But ordinary workingmen were unable to afford such expensive condiments, and as a rule their meals were limited to coarse black bread and greasy soups.

ordinary workingmen were unable to afford such expensive condiments, and as a rule their meals were limited to coarse black bread and greasy soups.

Intellectual Life in the Gilds. Intellectually, little stimulation was to be found in the performance of a medieval craft. It taught the workman nothing of the outside world and provoked slight mental activity apart from the task itself. Books were almost unknown except among the clergy, and knowledge of other communities filtered in only infrequently through the marvelous but fanciful stories of traveling merchants and soldiers.

MEDIEVAL COMMERCE

Commerce Slight in Early Medieval Times. The commercial side of medieval economic life was extremely elementary at first. It was restricted to barter among the residents of a town or manor, with only rare visits by wandering peddlers or minstrels to break the seclusion of a group. Money was little used or needed. Gold and silver were scarce; coins were hard to protect against counterfeiting. Prices did



War was the most exalted profession, and the armorers' workshop possessed an ornateness uncustomary to the ordinary workman. Compare the delicate tracery of the Gothic wood carving with the machine-made patterns of modern industry. (From an exhibit in the Metropolitan Museum of Art, New York.)

not change through wide ranges, as they do in modern times. The raw materials of manufacture, and sometimes finished goods, were contracted for long in advance and exchanged at customary prices. A farmer found it easy to trade a basket of eggs for a new woolen cap, and most members of the community could likewise satisfy their simple wants without resorting to money or to merchants from foreign parts. The roads were rough, and in wet seasons heavy with mud; conveyances were crude and awkward; the land was infested with robbers. In the early Middle Ages the merchant was brave indeed who ventured to ride with a pack of silks, gold ornaments, tooled

leather, or tempered swords behind him, unless he was rich enough to hire a convoy of armed men to protect him.

Increase in Commerce: Town Fairs. Nevertheless after the tenth century merchants did go forth upon the roads with increasing frequency. A common feature of medieval commerce was the annual fair which attracted at stated periods a large assemblage of traveling merchants. As a rule, towns specialized in certain products from the countryside, and it was widely understood that the best occasion to buy the woolen cloth of Flanders or the wines and silks of southern France came within a certain month and at a certain town. Whatever the specialty of a place, merchants gathered in the region and a spirited exchange of products went on in strange tongues. Much as the local merchants resented the departure of money from their own town and the competition of outsiders, the fairs were pleasing to the local lord or bishop, who levied taxes upon visiting merchants and filled his treasury for the coming year. Many a castle and cathedral were built with such funds. To attract merchants, the feudal lords found it expedient to take active steps to drive out highwaymen and sneak thieves from the solitary roads and crowded fairs, and to offer travelers the protection of a guard of soldiers.

Merchant Gilds. The merchants, like the craftsmen, organized themselves into gilds for regulating competition and establishing the conditions necessary for peaceful trade. They pursued robbers with vigor, made trade agreements with distant towns for the exchange of products, regulated taxes and customs dues to prevent unusual extortions, and made stringent rules to prevent unscrupulous or enterprising members from hurting the business of others in the gild.

Medieval versus Modern Times. We see now that in some respects the medieval world was beginning to resemble the world we know today. But the levels of living were very different. In agricultural life, which was by far the most important activity, the lot of the innumerable serfs was deplorable. Not only was their level of comfort low but, in addition, they could do little to raise it or to pass into a higher level. The medieval, like the ancient, world rested upon a fundamental division between the working, propertyless class and the military proprietors. In both worlds a person's class depended upon heredity, and therefore it was virtually impossible for a person to rise. This system, which today would be regarded as unjust, in the Middle Ages was looked upon as theoretically perfect. As to industrial life,

we must remember that most of the power and wealth was held by the manorial lords on their domains. And even in the craft guilds very little was done to increase the productivity or the comforts of the great body of workers. Some improvements occurred, but they were not the result of earnest efforts to achieve definite improvements.

SUMMARY

In the Middle Ages the feudal system organized economic life in small independent units, the manor and the guild. Both the serfs on the manors and the workers in the guilds had few rights and lived poorly. In the manor especially, the serfs had almost no chance to better themselves. Life was regulated almost wholly by custom. There was little incentive to improve productive methods. Commerce lagged because there was no authority able to maintain the peace.

QUESTIONS AND PROBLEMS

1. Tell how the economic life of the people in western and southern Europe was affected by the changes that took place during the decline and downfall of the Roman authority.
2. Did feudalism improve the economic conditions that preceded it? Explain.
3. Describe the labor system of the Middle Ages. Tell how it resembled the labor system of ancient times. Point out differences between the two systems of labor. In which was the condition of the laborer preferable?
4. Explain the organization and economic activities of a medieval manor. Include in your account: (a) the manorial village; (b) the three main fields; (c) the division and allotment of farm land; (d) the mode of cultivating the soil.
5. What was the craft guild? Mention ways in which it differed from a labor union of today.
6. Point out ways in which the craft guild promoted industry. In what ways was it injurious to economic progress?
7. Compare the work of a medieval craftsman with the work of a skilled artisan of today. Which had the more attractive employment? Mention details that support your view.
8. Describe the commercial side of medieval economic life. Was commerce as advanced during the Middle Ages as during ancient times? Give evidence.

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9. *Report for a volunteer:* Find how the monotonous food of the Middle Ages helped to bring about the discovery of America. See E. P. Cheyney, *European Background of American History* (Harper, 1904), pp. 9-14.
10. What were the merchant guilds? Tell why they were formed. What did they do? Have we organizations like them at the present time? Offer evidence to support your answers.
11. Which of the readings listed below looks most interesting to you? Read the reference you select and tell how it supplements this chapter.

READINGS IN THE CLASS LIBRARY

1. "Before the Industrial Revolution," Marshall and Wiese, *Modern Business*, pp. 16-19.
2. "Work in Medieval Times," Hayward and Johnson, *The Story of Man's Work*, pp. 86-116.
3. "A Colonial Plantation," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 35-37.
4. "Predecessors of the Labor Unions," Forman, *Sidelights on Our Social and Economic History*, pp. 262-66.

Chapter 3

THE REVOLUTION IN FARMING AND MANUFACTURING

DECLINE OF THE MEDIEVAL ECONOMIC WORLD

Increasing Use of Money Payments Weakened Feudalism. Even while the manor and the craft and merchant guilds were at their highest development, forces were at work which undermined them and prepared the way for modern economic life. As early as the thirteenth century, in certain parts of Europe the feudal system was weakened by the substitution of money payments for the customary services which the serf owed to the lord. Whereas the serf in earlier times had been obliged to work a certain number of hours regularly on the lord's field and to use his master's equipment for baking and brewing, a fixed money payment was slowly substituted for such obligations. As prosperity grew and commerce developed, the lords found it increasingly difficult to keep the serfs on the domain where they were born. Many of them bought their freedom outright and went to live in the towns, and their improved conditions caused other serfs to do likewise. In certain regions there was a custom that any serf who had escaped from the manor and remained a year and a day without being seized was thereby freed.

Power of the Kings Weakened Feudalism. One cause of the substitution of money payments for services was the increasing power of the kings. The numerous conflicts between the kings and the nobles in the Middle Ages led to the victory of the former. The kings needed money for the Crusades, and demanded it from the barons, who obtained it partly by liberating their serfs. The kings needed money also to maintain their position and power, and found a ready source in the town populations, which were growing due to the migrations

of the serfs. The wealthy town merchants were eager to buy commercial privileges and freedom from the host of irksome medieval restrictions with which they were burdened. From the merchants and from the master craftsmen of a prosperous town, the king was able to secure a handsome money gift in return for a charter granting the town partial self-government and independence of any feudal master save the king himself.

Growth of Money-Lending and Banks. The increased use of money made borrowing a necessity. In the early Middle Ages it was difficult for anyone to borrow money, since the religious beliefs of the time held that the charging of interest was sinful. People believed that it was wrong to get something without labor, and that the man who merely lent money was not rendering any service entitling him to reward. Today we say that *usury* is the taking of unfair or illegally high interest; at that time any interest at all was regarded as usury. For a time the small Jewish population scattered throughout Europe was almost the only group which practiced the lending of money for interest. Naturally few people were willing to "lend out money gratis," as Antonio did in *The Merchant of Venice*. In consequence, despite continual persecution the Jewish bankers made themselves invaluable to the greedy and careless nobility. Before long, others of the commercial population gave up their religious scruples and engaged in money-lending, the goldsmiths in particular coming to act as bankers.

Growth of Cities and Commerce. The movements described above stimulated the growth of cities, especially around sea and river ports, where the population was commercial and industrial. Some of the powerful towns formed commercial leagues, such as the Hanseatic League of northern Europe, which organized banking systems and provided land and water routes of transport. As a result, commerce throughout Europe and with the East grew amazingly.

Mercantilism. The growth of commerce and the increasing use of money stimulated the development of mercantilism, an economic theory which was accepted for three hundred years by practically all European statesmen. The flood of silver and gold which entered Europe after the conquest of Mexico and Peru, and the rise of strong national states, also contributed to the acceptance of the ideas of the mercantilists.

According to their theories the strength of a nation depended largely

on its supply of gold and silver, for with an abundance of the precious metals a strong army could be supported and a strong navy could be maintained. Accordingly the rulers of a country, the mercantilists declared, should strive in every way to increase its store of bullion. This could be accomplished, they held, in only two ways: either by mining the precious metals or by establishing a *favorable balance of trade*, that is, by selling abroad more goods than were bought abroad, thereby causing a flow of gold and silver to enter the country.

In accordance with the mercantilist theory the countries of western Europe, including England, adopted policies that they thought would bring about a favorable balance of trade. They passed navigation acts which placed heavy taxes on imported goods, and even prohibited imports altogether; at the same time they encouraged exports. Agriculture too was helped by the government in order to provide for the country an ample food supply and to make purchases of food from outside unnecessary. Importation of raw material, however, was encouraged, so that it might be made into finished products to sell abroad at a higher price than the cost of the raw material. Shipping was also stimulated by government bounties and rewards. All activities by individuals, companies, or colonies that interfered with the mercantile system were stopped; and government regulation and control of economic enterprises became the common practice.

Changes in the Nature of the Remaining Manors. Meanwhile in western Europe, and particularly in England, forces were at work that loosened the rigid system of land division found in the manor (page 13). As feudal services were changed into money payments, the landlord had either to hire laborers to do the work on his own plot of ground, or to rent the plot to some tenant and avoid further cares of management. In the fourteenth century a fierce plague, known as the Black Death, took terrible toll in many manorial sections, hastened the break-up of the old system by causing an extreme scarcity of labor, and increased the newer type of tenancy. The new tenants and small proprietors brought steady pressure to bear for the unification of small strips into larger areas where crops could be cultivated more efficiently. Gradually, also, knowledge of new crops and of better farming methods brought about great changes in agriculture.

Wool Production in Place of Agriculture. The medieval land system was further weakened by the increased opportunity to make money from the production of wool, which came into great demand

in Flanders and England in the fifteenth century. Wool could be raised faster and with less effort than agricultural products. With labor scarce and with the clumsy strip-method of farming more irksome than ever, many landlords completely abandoned tilling the soil, joined their strips, and inclosed them as a sheepwalk or pasture. In many instances they also extended the inclosures to include all or most of the land which had been used as a common pasture for all the inhabitants of the manor. The inclosure movement proved profitable to the landlords, but brought much suffering to the villagers, who were often forced to move to the towns in search of employment.

THE DOMESTIC SYSTEM OF INDUSTRY

Decline of the Medieval Handicrafts. The growth of commerce, rising prosperity, and the increasing population of the towns led also to the breakdown of the medieval system of handicrafts. In that system each family had been fairly independent. It had usually owned all the necessary, simple tools of craftsmanship, had secured raw products for itself, and had turned over the finished goods to the lord or to some neighboring merchant in exchange for other commodities. But by the seventeenth century, and especially in the eighteenth, many laborers and farmers had lost their homes, owing to the land inclosures that resulted from the increase in sheep-raising. Many of these people could not afford to own even the simplest tools, to invest in raw materials, or to maintain a home in which to pursue a craft. Their inability to engage in production on the same independent basis as the wealthier craftsmen played an important part in the development of the domestic system.

Domestic System. Under the domestic system the managers of industry were no longer master craftsmen themselves, but financiers and organizers. The merchant-employer of the time, who was later to develop into the capitalist of the nineteenth century, could afford to buy raw materials in large quantities, to erect large dwelling-quarters or clusters of cottages, and to install a sufficient quantity of spinning-wheels, looms, tanning-vats, forges, and other implements needed in production. Laborers would apply for work, receive a loan of tools and a supply of materials, go to their dwelling-quarters and work the material into finished goods, and return the goods to the capitalist at a specified price per piece.

Advantages of the Domestic System and Its Growth. The domestic system was an advance toward the modern factory system, but it was marked by essential differences in that it involved at first neither new machinery nor improved methods. However, it was a step toward coöperation and large-scale production. The merchant-employer could save money by purchasing supplies and tools in great quantities. He could avoid duplication of capital by making one tool serve more men than one could serve in the small shop of a master craftsman. He could hire men cheaply in great numbers, because the inclosure movement had forced many men to leave the manors.

The superior efficiency of the new system drove more and more of the old independent craftsmen out of work, and led to a rapid concentration of labor in the towns most favorably situated for manufacturing. For the textile industry in England such towns were located chiefly in the damper regions near rivers, where the moist air prevented the threads from breaking easily. By the eighteenth century the medieval system of isolated industrial units had given way almost entirely to the domestic system.

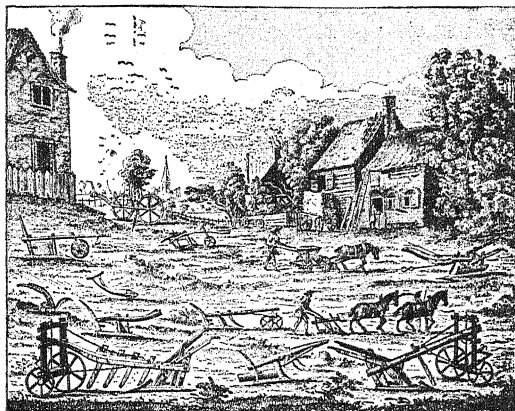
Life of the Domestic Artisan. Where an industry had become established and successful, the lot of the workers was usually more fortunate than the average lot of either the medieval craftsmen or the factory workers of the early nineteenth century. During the early and the middle eighteenth century travelers in England reported a scene of relative prosperity under the domestic system. English woollen cloth was in great demand abroad, money flowed into the pockets of the new capitalists, and pittances at least came regularly to their employees. Overproduction and unemployment were almost unknown. An artisan was able to combine his regular labor with gardening and to have a stable family life, since he could have his home at a little distance from the central shop where he secured his raw material. He could bring home a supply of material and work on it, while his wife and children were usually able to assist him. Together they could care for a few farm animals and carry on enough gardening to provide themselves with most of the necessary food.

Although the domestic scene had certain fortunate aspects often lacking at the present time, conditions were bad in other respects. This is particularly true if we examine the level of living of the workers in terms of the shelter, food, clothing, and comforts available

to them. Bitter poverty was commoner than it is now, ideas of comfort were less advanced, life was hard and short and full of struggle against ills which are much less prevalent today.

THE REVOLUTION IN FARMING

Conditions Leading to the Agricultural Revolution in England. Medieval economic life, as we have seen, slowly gave way to more flexible arrangements. Neither owners nor workers were restricted in their movements, their occupations, or their ways of living as they had once been, but were comparatively free to transfer their wealth or services and to unite with others in various projects. When the development mentioned above persisted for several centuries, it brought about two results. In the first place, the process of land in-



As late as the 18th century, most farmers made their own plows. This picture shows a few of the wide variety of unstandardized, inefficient implements. (From *The Universal Magazine*, London, 1748.)

losures, in the form of combining many individual strips under the control of a single farmer, and later in the form of turning farm tracts into large pastures for sheep-raising, steadily increased the wealth of the large landowners, at the same time ruining the small farmers, who were forced to become wandering farm laborers or to seek employment in the towns. In the

second place, the concentration of land in the hands of a few people with more wealth than they could use to satisfy their own wants led such people to use part of their wealth for experimentations and improvements which might not yield an immediate return. *Surplus wealth*, as such wealth is called, provided the money for new processes and machinery.

Improvements in Farm Production. The spirit of change and inventiveness, reinforced by surplus wealth, reached its climax in the eighteenth century in a rapid and profound upheaval in agriculture and industry. For the first time a few progressive farmers began to search for better methods of production. They were encouraged in their efforts by the English Government. Large tracts of land that had been swamps and heather were drained and brought under cultivation. The old wasteful method of letting one-third of the cultivated land lie idle every year was gradually abandoned. Instead, people began to adopt crop rotation, in which a crop that depletes the soil is followed by a different crop which builds it up again. In addition, fertilizers were employed to enrich the soil. Variety of foodstuffs was the key to more effective farming as well as to a better diet, and the English gradually became resigned to the despised turnip, and to cultivating such crops as clover to improve the pasturage for their cattle.

Improvement of Live Stock. Along with more scientific crop-raising came improvement in the quality of live stock, both by better feeding and by systematic breeding. At first, of course, the laws of heredity governing the improvement of animals and plants were unknown; but on the simple principle that offspring resemble parents, the better stocks were selected for breeding. The result was a substantial increase in the weight of cattle and sheep as well as in the milk yield of cows and the wool borne by sheep.

Improvement in Farm Implements. At the same time the simple equipment of the farm was gradually improved—first by the introduction of plows and harrows of superior design and sturdier construction. Such implements would cut more deeply into the soil and form a better seed-bed. Later, as the outgrowth of a long series of inventions, came the horse threshing-machine, which increased the efficiency of the farm laborer and at the same time lightened his toil.

Triumph of the Large Farmer. Small farmers often showed both suspicion and resentment toward the new devices, especially when they saw themselves undersold and driven into poverty as a result of the new methods used by the large farmers. The gulf between the richer and the poorer farmers widened, and thousands of small proprietors and tenants were forced to give up their independence and wander from farm to farm or go to the towns seeking employment. By the second quarter of the nineteenth century the victory

of the large farmers was secure and England had become, as it still is, a country of large landed estates, differing in this respect from the other countries of western Europe.

THE REVOLUTION IN MANUFACTURING

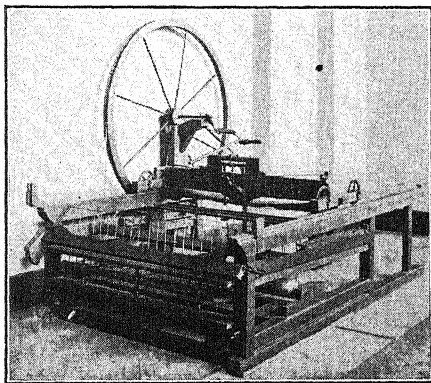
Conditions Stimulating Improvements. In manufacturing, as in agriculture, it was the introduction of machinery and scientific methods that made the years between 1750 and 1830 unlike any other period in the history of the world. Strange though it may seem, many of the fundamental principles of steam power had been understood by the ancient Greeks and Chinese, and no doubt ingenious or lazy artisans during the succeeding years had frequently invented labor-saving devices. These innovations had been unnoticed, forgotten, or forcibly suppressed. But in the middle of the eighteenth century new inventions were immediately brought to light and widely used, because conditions were ripe for them. In the first place, the ever increasing rush of workers to the towns furnished a cheap and abundant labor supply. Secondly, capital was plentiful, and surplus wealth had the same effects in industry that have been pointed out in agriculture. Thirdly, a large demand existed for manufactured products.

Inadequacy of the Early Textile Industry. The sharp pressure of necessity, which so often in history has been the mother of invention, was felt most keenly in the textile industry of England. Produce as fast as they could, the workers in this industry could not keep up with the increasing demand for cotton, linen, and woolen cloth. Within the textile industry itself difficulty existed, because spinning was much slower and less efficient than the other branch, weaving. From the time of the ancient Greeks until the eighteenth century there had been no fundamental improvement in the art of spinning. The housewife still depended on the age-old spindle and distaff. Holding a mass of cotton on a stick in one hand, she would slowly twist out a thread with the other, twisting and stretching it a little further by a weighted spool at the other end of the thread—purely a hand method. During the early years of the eighteenth century the spinning-wheel came into wide use, but even this marvelous invention did not bring any great increase in the speed with which thread could be made. Between three and five spinners were required to

keep up with one weaver; in consequence the need was keenly felt for a device which would enable spinning to catch up with weaving.

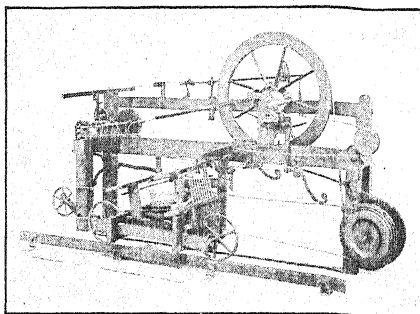
Flying Shuttle. Strange to say, however, the first invention in the textile industry came in weaving rather than in spinning. Previously weaving had been a hard task, requiring the operation of a heavy wooden hand-loom by which one parallel row of threads was alternately moved above or below another row, while another thread in a shuttle was pushed crosswise between the two parallel rows, weaving them together. The process of pushing the shuttle containing the crosswise thread to the far end of the loom and then pulling it back after the alternate series of threads had been shifted had been slow and laborious. In 1733, however, John Kay, a clock-maker, devised a *flying shuttle* which greatly reduced the amount of strength and labor needed in weaving by allowing the shuttle to move easily from side to side without requiring the weaver to leave his position.

Improvements in Spinning. After the invention of the flying shuttle, the demand for cotton thread and for woollen yarn became greater than ever and the dislocation in the textile industry caused by the superiority of weaving over spinning was intensified. To stimulate inventors, the Royal Society for the Encouragement of Arts and Manufactures offered prizes for a device that would enable a spinning-wheel to produce more than one thread at a time. The answer to the demand came from a weaver named James Hargreaves, who in 1764 completed his *spinning jenny*. This was a simple machine, operated by a hand wheel and capable of making eight threads at once. Within a few years the number was increased from eight to eighty, and the machine required no more than the strength of a child to operate it.



Hargreaves' spinning jenny, invented in 1764, was the first attempt to spin several threads of yarn at once. It contained all the elements, except rollers, of the modern spinning mule, but was worked by hand. (The Science Museum, South Kensington, England. Used by permission.)

Both the quality and the quantity of thread were still further advanced in 1771 by the *water frame* of Richard Arkwright. Two important principles were introduced with this invention: first, the operation of the machine by water power, and second, the pulling and



Crompton's "mule" was a combination of Hargreaves' "jenny" with Arkwright's "spinning frame," which was worked by horse or water power. Crompton's machine has a movable carriage which carries the spindles back and forth, stretching and spinning the yarn at the same time. (The Science Museum, South Kensington, England. Used by permission.)

twisting of the threads between two pairs of rollers somewhat similar to those now used in an ordinary clothes-wringer.

The valuable features of the earlier spinning devices were combined in 1779 by Samuel Crompton in his *mule jenny*, the main principle of which is still fundamental in the spinning industry; the machine has now been improved, however, so that two thousand threads can be made at a time by a single worker. Crompton's improvement also allowed the pro-

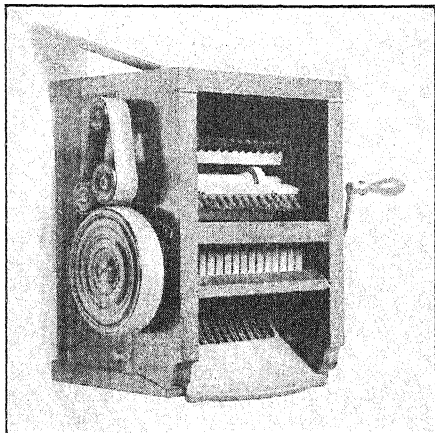
duction of fine cotton muslins, which had been impossible with the preceding inventions.

Whitney's Cotton Gin. The demand for cotton textiles would have quickly exhausted the supply of available raw pure cotton fiber had not Eli Whitney's invention of the cotton gin in 1793 furnished an ample supply by providing a cheap and effective means for removing the seeds from the cotton fiber.

Cartwright's Loom. Meanwhile the improvements in the spinning of cotton had placed the weavers at a disadvantage. This was removed, however, between 1784 and 1791 by the development of the power loom by a clergyman named Dr. Edward Cartwright. Cartwright's loom was operated at first by water power, but like other machines it could be made to run by steam.

Steam Engine: James Watt. On most of the rivers of England water power was limited by the sluggish flow of the streams. A steam engine, however, could be set up anywhere, and coal was ready at hand to increase its energy to an unlimited degree. When James

Watt made the first practical steam engine in 1763, he harnessed a natural energy which could drive the newly invented machines with undreamed-of speed and certainty. In an older form of steam engine invented in 1705 by Newcomen, the up-and-down movement of a piston was very slow, for although the upward motion was produced by steam pressure the downward motion was brought about by air pressure alone. Watt's chief improvement in the steam engine consisted in closing both ends of the cylinder and arranging for steam to drive the piston rapidly in both directions. He also introduced regularity of speed by a device called a *governor*. In addition he perfected an arrangement for driving a wheel by a belt connecting the wheel with the engine.

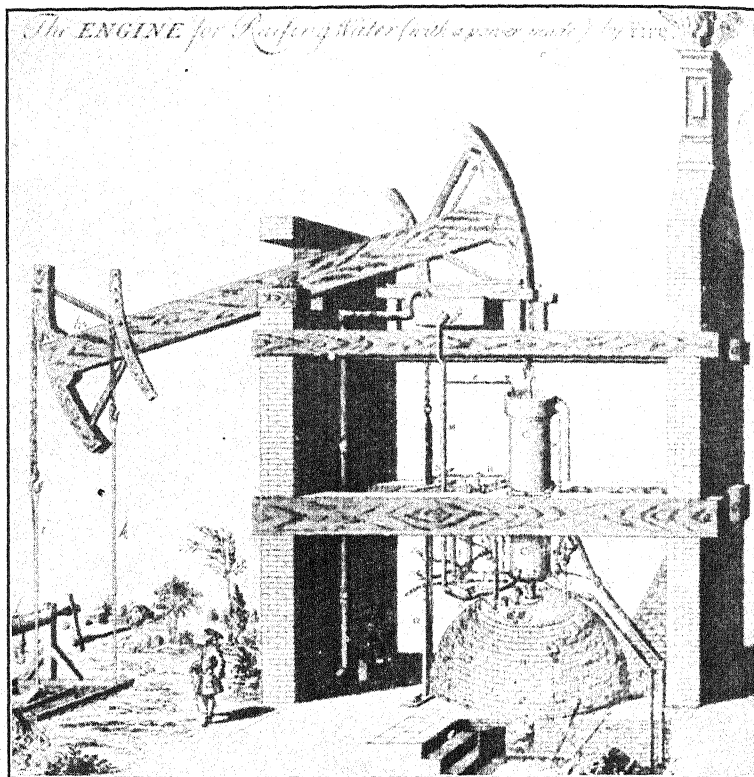


Whitney's cotton gin consisted of a wooden cylinder encircled by rows of slender spikes set half an inch apart, which extended between the bars of a grid set so closely together that the seeds could not pass, but the lint was pulled through by the revolving spikes. A revolving brush cleaned the spikes, and the seeds fell into another compartment. (Courtesy U. S. National Museum.)

Steam was first used to run a spinning-machine in 1785; fifteen years later scores of Watt's engines were in use in the industrial centers of England.

Iron and Steel Methods Improved. The construction of vast numbers of new machines called for iron and steel in large quantities. In consequence, the attention of the industrial world turned to the problem of smelting iron ore so that impurities could be removed quickly and the metal made strong as well as malleable. By 1735 the substitution of coke for charcoal as a fuel had begun to improve smelting. Twenty-five years later the process was further improved by the substitution of an air-blowing apparatus for the crude bellows of earlier times. In 1783 the process of *puddling* introduced the use of coal with oxygen so that crude pig iron could be turned into malleable iron suitable for shaping into various forms. From that time on in

the mining and metal industries invention after invention followed rapidly.



This odd contrivance, looking as much like a guillotine as a steam engine, was one of the first successful attempts to harness the force which Watt had observed rattling the lid on his family teapot. (From Vowles: *The Quest for Power*.)

SOCIAL AND POLITICAL EFFECTS OF THE INDUSTRIAL REVOLUTION

Early Suffering of Workers. One immediate effect of the new inventions was poverty and suffering for the working classes. Not only were the independent farmers expelled from their lands and

impoverished by the extension of sheep-raising and the inclosure movement, but the handicraftsmen too were powerless to compete either in quantity or in quality with the products of the new machines, at least in the textile industries. The generation from 1800 to 1830 marks the lowest point in the welfare of the British working class, certainly in modern times, and in many respects in all history. Even the American Negro slave of the same period had at least fresh air, fresh country food, and some time for rest and recreation. But in the factory towns of northern England entire families were huddled in damp, poisonous cellars at night, and for fifteen or eighteen hours a day were driven at the most wearing kind of labor in the mills and factories. In the mines the workers were often compelled to toil waist-deep in water; in the factories they were forced to breathe flying dust and harmful gases. Wages, and consequently allowances for food and clothing, were incredibly small. Thousands of workers clamored at the factory gates for employment, and the owners usually got as much as they could out of the workers and then discarded them ruthlessly for others.

Attitudes toward Machinery. During the early stages of the Industrial Revolution workmen blamed their misfortunes upon the introduction of machinery, and even went so far as to smash newly invented looms and to threaten the lives of the inventors and operators. Today workmen realize that improved machinery, by increasing production, makes possible more wealth and higher levels of living for all society, whether the higher levels be in the form of more goods or more leisure or both. Hostility to machinery is negligible today.

Attitudes toward Employers. Workmen blamed their misfortunes upon their employers. Doubtless many of the employers of the period 1800-1830 were as cruel and selfish as they now seem to us, judged by our more humane standards, but it would have been hard for any manufacturer to adopt more merciful methods. Competition among producers was extreme, and any single manufacturer who had tried to pay higher than average wages or to require work for fewer hours would have faced ruin. Today workers realize that the terrible conditions of the early nineteenth century have been improved, and can be improved still more, only by inducing or forcing factory-owners as a class to improve their practices.

Class Divisions. One of the main results of the Industrial Revolution was the creation of a sharp division between the employer and the worker. The employer too often has been a business man with little interest in or sympathy with the actual processes of manufacture; his main interest has generally been in profits. The worker no longer occupies a place similar to that of the apprentice or journeyman in the medieval mastercraft household. Consequently, he feels much less interest in his employer, and he tends to unite with other workmen in common antagonism to an owning class whose interests often clash with his. At times this opposition of goals is modified to the extent that workers acquire shares in the ownership and profits of industry. This modification may grow in coming years, but at the present time we still have a working group keenly sensitive to its own interests and often regarding the employer as an enemy with opposite and conflicting interests.

Conditions and Problems Today. The early period of suffering was, in large measure, a transitional stage which is unlikely to be repeated, at least in the same form. Today we have nothing quite comparable to the suffering and the slaughter by fatigue and disease of the workers during the Industrial Revolution. Over a long period of time, the worker of the present has benefited by the raising of his level of living. But this improvement should not blind us to the evils of today—to unemployment, to bad working-conditions, and to levels of living that still yield little by way of comforts and well-being. So long as such evils exist, two great central problems remain unsolved: (1) How can more wealth be produced? (2) How can the wealth that is produced be made to serve the best interests of all the people? This book will attempt to suggest approaches to these two tremendous problems.

SUMMARY

Feudalism declined with the growth of kingly power, and with the substitution of money payments for services. These tendencies undermined the old relationship between lord and serf, which had been fixed by custom or status. The movement away from the manors, caused largely by a tendency to specialize in sheep-raising and by the inclosure movement, stimulated trade, cities, commerce, and banks. In consequence the manors underwent fundamental

changes as to tenancy and methods, while at the same time the surplus wealth and the unemployed laborers promoted the domestic system of industry and the beginning of capitalism, which in time supplanted the medieval handicrafts. The Agricultural Revolution was characterized by increasingly large farm holdings, more stock-raising, concentrated wealth and power, and improved methods. The Industrial Revolution, originating with improvements in the textile industry, steam power, and the manufacture of iron and steel, established the factory system with its intolerable working-conditions. These conditions have been gradually improved, but the problem of raising the levels of living through more efficient production and better management remains with us today.

QUESTIONS AND PROBLEMS

1. How did the substitution of money payments for services weaken the manorial system? Tell how the Crusades helped to bring about money payments.
2. List the main causes that stimulated the growth of towns and cities.
3. Why did the merchants usually support the kings in the struggle between the kings and the nobles?
4. Explain the medieval attitude toward the payment of interest on money. How did this attitude affect business?
5. Tell how the Black Death in 1349 affected the medieval manor; the condition of the serfs. Consult Hutton Webster, *Early European History* (Heath, 1929, rev. ed.), pp. 548-51.
6. What were *inclosures*? Tell how they affected the manor.
7. Explain the domestic system of industry. Point out ways in which it differed from the medieval system of handicrafts.
8. What climatic feature explains the location of most of the English towns in which the textile industry developed?
9. Compare the life of an artisan under the domestic system (a) with the life of a medieval craftsman and (b) with the life of a factory worker a century ago. Which of the three workmen enjoyed the highest standard of living?
10. What were the main causes of the revolution in farming in the eighteenth century? Explain the main changes that occurred.
11. How did the Agricultural Revolution help to bring about the Industrial Revolution? Mention two other influences that contributed to the change in manufacturing.
12. Did necessity prove to be the mother of invention in the textile industry in the eighteenth century? Can you suggest a better explanation for the coming of the inventions?

13. Name the contribution to industrial progress made by each of these men: Kay, Hargreaves, Arkwright, Crompton, Cartwright, Watt, Whitney. Which seems to have contributed most? Give reasons.
14. What changes were made in the iron industry? How did they promote the Industrial Revolution?
15. Tell how the Industrial Revolution affected the working classes (a) at the time and (b) in the long run. What fundamental change was brought about in the relations between employees and employers?
16. List as many results of the Industrial Revolution as you can find in the references given below. Which result do you regard as the most important? Give reasons.
17. Mention problems of the Industrial Revolution that remain with us in acute form today.
18. Prepare a special report on one of the references listed below.

READINGS IN THE CLASS LIBRARY

1. "The Industrial Revolution in England," E. C. Seaman, Forman, *Sidelights on Our Social and Economic History*, pp. 20-24.
2. "Early Attempts to Establish the Factory System," C. D. Wright, *ibid.*, pp. 137-40.
3. "The Industrial Revolution," Hill, *Readings in Vocational Life*, pp. 27-30.
4. "The Results of the Industrial Revolution," L. C. Marshall, *ibid.*, p. 31.
5. "The Industrial Revolution," Patterson and Scholz, *Economic Problems of Modern Life*, pp. 9-13.
- *6. "The Industrial Revolution," Chase, *Men and Machines*, pp. 64-76, 85-88.
7. "Balance of Trade Theory," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 128-29.
8. "The Factory System," *ibid.*, pp. 529-37.
9. "Aspects of the Industrial Revolution," Marshall and Wiese, *Modern Business*, pp. 19-25.
- *10. "The Coming of the Steam Engine," Hayward and Johnson, *The Story of Man's Work*, pp. 117-30.
11. "The Growth of Industry in England," *ibid.*, pp. 131-37.
- *12. "Man and the Machine," *ibid.*, pp. 150-62.
13. "The Factory System at the Beginning of the Nineteenth Century," *ibid.*, pp. 169-74.

Part Two

PRESENT LEVELS OF LIVING



Looking Backward—and Forward

THE ANCIENT economic world had its cities and commerce, its division between agricultural and industrial peoples, and some degree of specialization. But it made almost no specific attempts to speed up the production of wealth in order that society might advance materially and achieve a widespread culture. On the lower levels of living the masses dwelt in poverty and without hope of advancement.

In the medieval economic world, the serfs on the self-sufficient manors in theory had greater freedom than the ancient slaves, but in practice their lot was little if any better. In the towns the gild system contained the seeds of coöperative effort, but it discouraged advances in productive technique. In both agriculture and industry the level of living for the large majority of the people was deplorably low, and rose very slowly. Moreover, in those days people found it virtually impossible to pass from one class in society into a higher one.

The revolutions in agriculture and industry led to tremendous increases in wealth, thus for the first time making it possible to raise all of the levels of living immeasurably. But in agriculture the first result of the revolution was to increase the tendency toward concentrating wealth in the hands of the great landowners and to depress still further the lot of the small farmers. In industry, too, the revolution brought about almost unbearable hardship to the workers.

The present century has shown that the first phase of the Industrial Revolution was a transitory upheaval, and that increased productive efficiency has provided wider comforts for the mass of the people than were ever enjoyed before. Today we must seek to improve this situation by unrelenting efforts to better agricultural and industrial techniques. Even more important, we must order and control our productive machinery so that it will work for the benefit of society as a whole, raising all levels of living at least to the point of comfort.

Obviously, the first step toward raising the levels of living is to *know* what the present levels of living are, what part of the total population is to be found on each level, and what effect a particular level has upon a person's daily life. Part Two of this book, therefore, analyzes the three broad levels of living in America—poverty, comfort, and riches.

Chapter 4

POVERTY IN THE COUNTRY

THE MEANING OF POVERTY

Definitions of Poverty. Poverty is the lowest level at which people live. It is obvious that economists may classify levels of living into a few levels or into an infinite variety, and the range of the poverty level will be great if there are only a few levels and relatively small if there are a larger number of levels. Our problem is to make enough classifications to provide a true picture without having so many subdivisions that confusion will result from trying to examine all of them.

This book therefore presents three major levels of living—poverty, comfort, and riches. It will be helpful to regard poverty as of two sorts. First, there is extreme poverty, which has been defined as

a level at which the income, even though expended with ordinary prudence, is insufficient under modern conditions for even the physical upkeep of a family of moderate size. Characteristics: undernourishment, overcrowding, deterioration of household equipment and clothing, liability of acute distress with any minor disturbance of the daily equilibrium.¹

This means that the preservation of life is uncertain; that malnutrition and disease are common experiences; that all the energies of the family are pressed into the effort to escape from a continually precarious existence.

The second type of poverty may be called the minimum-of-subsistence level. Here the income is sufficient for a barren sort of physi-

¹ Edited by Paul Howard Douglas. *The Worker in Modern Economic Society* (1932), pp. 283 *et seq.*

cal upkeep, but is inadequate for the emergencies of life or for any additional pleasures that cost money. People on this level live below the *minimum* requirements for health and decency. Above this level are the lowest ranges of the second major level of living—comfort—which will be discussed later.

Poverty Can Be Measured in Terms of Income. It is necessary at this point to define poverty more specifically. The notions of poverty, comfort, or riches include many unmeasurable elements, but they also embrace definite items that can be evaluated. Of these the most specific, from the practical point of view, is the real income of a family, that is, the amount and quality of goods that the money income of the family will buy. When we consider the matter on this basis, the problem is: How much income must a family have to be above the poverty level, that is, to buy the minimum of goods that are necessary for decency and comfort?

To mention any specific sum of money is of course more or less arbitrary; a few dollars one way or the other may make little difference. Nor can one say definitely just what goods are necessary, or of what quality, or of what amount. But by observing the amounts earned and spent by families in various years, localities, and circumstances, by seeing what goods are purchased and at what prices, we can form a general idea of the conditions of living associated with the different levels of income. Then, if families of a certain level are observed to suffer from lack of food and from inadequate clothing and housing, that level of income can be said to be the poverty level. Going up the list and finding a steady increase of well-being, we can fix upon certain amounts of income as associated with higher concepts of poverty and comfort.

Of course any such standards must be considered as applying only to the price level of a particular time and place, unless averaged over larger areas and periods. A distinction must also be made between the amounts necessary for a child and an adult, for a single individual and a family. The *standard family* is usually thought of as constituting five members, the parents and three children.

Poverty Income on the Farm. Even those economists who agree with our definition of the poverty level make varying estimates as to what income is necessary to raise a family to the comfort level. But the estimates are fairly similar when based upon extensive investigation. In 1928 the United States Department of Agriculture

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published an article ² summarizing the results of a study of 14,000 farm families over a period of four years. The study indicated that the absolutely minimum requirement for health and decency for a farm family of five is an income of \$1,800 a year, of which \$1,200 should be in cash and \$600 in farm products.³

This figure was set in 1928, but as the cost of living did not fluctuate greatly from the end of the World War (1918) to the end of the



When the cold blasts of March sweep down upon this typical prairie shack, poverty is quite realistic to these little children. (Courtesy U. S. Bureau of Reclamation.)

“prosperity era” of 1922–29 (except in 1921), it is a serviceable figure for the eleven years as a whole. Thus we may say that any standard farm family earning less than \$1,800 a year after the war and prior to 1930 was on the poverty level as we have defined it. To pursue our classification further, we may safely say that farm families with less than \$1,400 were not only below the standard of health and decency, but were actually in the extreme poverty group. The situation beginning with the depression period after 1929 will be discussed later, but it is necessary to bear in mind during the present discussion that whatever the situation of the farmer may have been until 1929, it became worse with the coming of the great depression that began at the end of that year.

² By Eugene Meritt, *Yearbook of Agriculture* 1928, pp. 280–82.

³ *Ibid.*, p. 282.

THE FARMER'S INCOME

Average Income per Farm Family. Now that we have set \$1,800 and \$1,400 as the upper boundaries of farm poverty in general and extreme farm poverty, respectively, the next question is: How many farm families live on the poverty level? A study made for the National Bureau of Economic Research, completed in 1930, gives statistics covering all of the farm families in the country. The following table is taken from this study:

TABLE 1
INCOME OF FARM FAMILIES ⁴

<i>Year</i>	<i>Total Income in Current Dollars (in Millions)</i>	<i>Income of Farmer and His Family in Current Dollars</i>
1919	\$ 7,831	\$1,228
1920	10,429	1,634
1921	755	118
1922	5,400	861
1923	4,911	780
1924	3,144	496
1925	1,651	261
1926	6,265	1,010
1927	7,810	1,275

The right-hand column of Table 1 shows that in no year was the average income of a farm family above the poverty level. Even more significant is the fact that in only one year was the average above the extreme poverty level. The average for the whole period was \$740!

Number of Farm Families with Low Incomes. The figures that we have been examining do not tell *how many* farm families receive low incomes. But obviously, if the average per family is but little more than half of \$1,400, the vast majority of families must be on the extreme-poverty level. Direct investigation bears this out. The article on the study of 14,000 families, to which we have referred, estimates

⁴ W. I. King, *The National Income and Its Purchasing Power*, National Bureau of Economic Research, New York, 1930, p. 310. This table includes incomes of farmers and their families, but not those of hired workers. *Current Dollars* are the actual money of the year named. No attempt has been made here to adjust the differences in purchasing power of the dollar in the various years.

that 50 per cent of these families had cash incomes under \$800 per year, and that 75 per cent of them earned less than the \$1,200 in cash that is the minimum for health and decency.⁵

Another summary report stated that the gross annual income *per farm* over the whole country was \$1,840 during the period 1924-28.⁶ But the average farm supports more than one family. Furthermore, when looking at the distribution of earnings among farms, it appears that the average gross earning *per farm* was under \$1,000 in two states, under \$1,500 in twelve more, and under \$2,000 in another eleven.⁷ These figures throw additional light upon what the majority of farm families earn.

Earnings of Farm Employees. If we turn from a consideration of what farm-owning families earn to a survey of farm wages, the following table is helpful.

TABLE 2
MONTHLY FARM WAGES FOR JULY ⁸

<i>Year</i>	<i>Wage in Current Dollars per Month (without Board)</i>	<i>Year</i>	<i>Wage per Month in Current Dollars (without Board)</i>
1923	\$48.61	1927	\$49.52
1924	48.02	1928	49.32
1925	48.55	1929	50.53
1926	49.89	1930	47.24

Table 2 shows that a mature man would earn less than \$500 if he worked an entire year at the July rate, and July is a banner month for agriculture. Since the earnings of a standard family are only about 20 per cent above those of its chief wage-earner, it is clear that practically all families composed entirely of agricultural laborers and nonworkers live in extreme poverty.

Low Incomes Yield Scant Goods. No matter how much we look at income statistics and no matter how small the figures seem, it is impossible to understand how little they yield until we translate them into goods purchased. The following table provides this information.

⁵ *Yearbook of Agriculture* 1928, p. 282.

⁶ *Yearbook of Agriculture* 1930, p. 245.

⁷ *Ibid.*

⁸ Adapted from *Yearbook of Agriculture* 1931, p. 1023.

TABLE 3

FAMILY LIVING FURNISHED BY FARM AND PURCHASED ⁹

	203 Kentucky Families, 1930		300 Ohio Families, 1926		180 Wisconsin Families, 1930		2886 Families in 11 States 1926	
Average total value of goods per family	\$689		\$933		\$1,730		\$1,598	
	<i>Am't</i>	<i>Per- centage</i>	<i>Am't</i>	<i>Per- centage</i>	<i>Am't</i>	<i>Per- centage</i>	<i>Am't</i>	<i>Per- centage</i>
Food	422	61.2	457	49.	580	33.5	659	41.2
Clothing	94	13.6	156	16.7	252	14.6	235	14.7
Rent	44	6.5	67	7.2	276	16.	200	12.5
Furnishings and equipment	15	2.1	31	3.3	61	3.5	40	2.5
Operation goods	47	6.8	98	10.5	256	14.8	213	13.3
Health	16	2.3	31	3.3	78	4.5	61	3.8
Advancement goods	30	4.4	46	4.9	90	5.2	105	6.6
Personal goods	18	2.6	29	3.1	63	3.6	41	2.6
Insurance	3	.5	13	1.4	70	4.	41	2.6
Unclassified	Under 50c.	0	5	.6	4	.3	3	.2

Table 3 helps us to understand rural poverty. It shows that only from \$18 to \$29 is spent for personal goods in the two poorer groups. Half of this amount goes for toilet articles and tobacco. This leaves from \$10 to \$15 a year for jewelry, candy, gifts, recreation. What vision does this bring up of Christmas or birthday joys? What possibilities for travel or weekly diversion are offered even by the \$63 or \$41 in the upper groups? For advancement, which includes education and reading, we see \$30 a year at worst and \$90 at best for a family of five. What insurance against disaster is there in a \$3 insurance premium, or even in a \$70 one? In brief, with any of the incomes described, a family is forced to spend almost all of its resources for the bare necessities of life. What is left for other desires is pathetically small. And we must remember that according to our minimum health and decency standard, the sums devoted to physical well-being are insufficient to maintain it.

⁹ *Yearbook of Agriculture* 1931, p. 1033.

Low Incomes Must Be Devoted to Necessities. Perhaps the most notable feature of Table 3 to one who hopes for better conditions is the proportion of income devoted to absolute necessities. If we regard the first five items in the table as essential, and exclude even health, we see that in the poorest group these items take over 90 per cent of the total income, and in the best group, which is still on the poverty level, over 82 per cent. How eagerly people crave the little things which make life pleasant is indicated by the table, which shows how rapidly the percentage spent for such things rises with income, even *before* the income is sufficient to provide adequate necessities. It might be noted incidentally that when income rises to over \$3,000, more than 40 per cent is spent for items other than food, clothing, and rent.

Engel's Law. If we look once more at Table 3, we see that the two groups of families which have nearly the same average incomes—\$1,536 and \$1,598—spend their incomes in very similar ways. This truth, which was first formulated by the German economist Engel and is hence called Engel's law, means that given a certain income, the uses to which it will be put do not vary widely from family to family. Expressed more definitely, Engel's law means that *as the family income decreases, the proportion spent for the necessities of life increases*, and vice versa. Economists have observed the operation of Engel's law so carefully that it may be said that a family is in all probability on the poverty level when it spends as much as 40 per cent of its income for food. The table shows that no group spent less than 33.5 per cent for food (and we must remember that these are farm families), and that the poorest group spent 61.5 per cent.

THE TRIALS OF RURAL POVERTY

Poverty as Described in Literature. No description in general terms and no figures can bring home the meaning of poverty to one who has not seen it. Poverty has been the lot of millions of men; it is the most ancient of tragedies. As we might expect, noted authors have often chosen it for a theme, and in the pages of literature are to be found many vivid pictures of what poverty does to people of every type of character and aspiration, even in the most advanced and prosperous countries. Dickens's stories of the London slums are filled with descriptions of conditions which still exist; Dostoevsky and

Turgenev make us feel sharply the misery of the Russian peasant and the despair of the city slum-dweller.¹⁰ Those who know the poor, and only they, can really sense the haunting miseries of the long, hard struggle to keep a large family alive on a pitiful income.

American Literature Depicting Rural Poverty. American writers have also treated poverty as a theme, although the novels in which poverty—and especially the poverty of rural life—has formed the background are few. Among novelists no one has pictured more vividly than Hamlin Garland the trials of rural life in pioneer times and of the farmer struggling on the poverty level today. The following passage from an early chapter of Garland's *Son of the Middle Border*,¹¹ describes not only some of the hardships of farm life, but also the helplessness of human beings in the grip of the natural forces with which farmers continually have to contend:

One of my duties, and one that I dreaded, was pumping water for our herd. This was no light job, especially on a stinging windy morning, for the cows, having only dry fodder, required an enormous amount of liquid, and as they could only drink while the water was fresh from the well, some one must work the handle till the last calf had absorbed his fill—and this had to be done when the thermometer was thirty below, just the same as at any other time. . . .

Some farms had ponds or streams to which their flocks were driven for water but this to me was a melancholy winter function, and sometimes as I joined Burt or Cyrus in driving the poor humped and shivering beasts down over the snowy plain to a hole chopped in the ice, and watched them lay their aching teeth to the frigid draught, trying a dozen times to temper their mouths to the chill, I suffered with them. As they streamed along homeward, heavy with their sloshing load, they seemed the personification of a desolate and abused race.

Winter mornings were a time of trial for us all. It required stern military command to get us out of bed before daylight, in a chamber warmed only by the stovepipe, to draw on icy socks and frost boots and go to the milking of cows and the currying of horses. . . .

It ought not to surprise the reader when I say that my morning toilet was hasty—something less than a “lick and a promise.” I couldn’t (or didn’t) stop to wash my face or comb my hair; such refinements seem useless in an attic bedchamber at five in the morning of a December day—I put them off

¹⁰ See, for example, *David Copperfield*, *Crime and Punishment*, *Poor People*, *Fathers and Sons*.

¹¹ Macmillan Company, 1922. Quoted by permission of the publishers.

till breakfast time. Getting up at five A.M. even in June was a hardship, in winter it was a punishment. . . .

Then came the fanning mill. The seed grain had to be fanned up, and that was a dark and dusty "trick" which we did not like anything near as well as we did skating or even piling wood. The hired man turned the mill, I dipped the wheat into the hopper, Franklin held sacks and father scooped the grain in. I don't suppose we gave up many hours to this work, but it seems to me that we spent weeks at it. Probably we took spells at the mill in the midst of the work on the chip pile.

Meanwhile, above our heads the wild ducks again pursued their northward flight, and the far honking of the geese fell to our ears from the solemn depths of the windless night. On the first dry warm ridges the prairie cocks began to boom, and then at last came the day when father's imperious voice rang high in familiar command. "Out with the drags, boys! We start seeding tomorrow."

Again we went forth on the land, this time to wrestle with the tough, unrotted sod of the new breaking, while all around us the larks and plover called and the gray badgers stared with disapproving bitterness from their ravaged hills.

Maledictions on that tough northwest forty! How many times I harrowed and cross-harrowed it I cannot say, but I well remember the maddening persistency with which the masses of hazel roots clogged the teeth of the drag, making it necessary for me to raise the corner of it—a million times a day! This had to be done while the team was in motion, and you can see I did not lack for exercise. . . .

As the ground dried off the dust arose from under the teeth of the harrow and flew so thickly that my face was not only coated with it but tears of rebellious rage stained my cheeks with comic lines. At such times it seemed unprofitable to be the twelve-year-old son of a western farmer.

One day, just as the early sown wheat was beginning to throw a tinge of green over the brown earth, a tremendous wind arose from the southwest and blew with such devastating fury that the soil, caught up from the field, formed a cloud, hundreds of feet high,—a cloud which darkened the sky, turning noon into dusk and sending us all to shelter. All the forenoon this blizzard of loam raged, filling the house with dust, almost smothering the cattle in the stable. Work was impossible, even for the men. The growing grain, its roots exposed to the air, withered and died. Many of the smaller plants were carried bodily away.

As the day wore on father fell into dumb, despairing rage. His rigid face and smoldering eyes, his grim lips, terrified us all. It seemed to him (as to us) that the entire farm was about to take flight and the bitterest part of the tragic circumstance lay in the reflection that our loss (which was much greater than any of our neighbors) was due to the extra care with which we had pulverized the ground.

"If only I hadn't gone over it that last time," I heard him groan in reference to the "smooch" with which I had crushed all the lumps making every acre friable as a garden. "Look at Woodring's!"

Sure enough. The cloud was thinner over on Woodring's side of the line fence. His rough clods were hardly touched. My father's bitter revolt, his impotent fury appalled me, for it seemed to me (as to him) that nature was, at the moment, an enemy. More than seventy acres of this land had to be resown.

Most authors in writing of "the merry merry farmer" leave out experiences like this—they omit the mud and the dust and the grime, they forget the army worm, the flies, the heat, as well as the smells and drudgery of the barns. Milking the cows is spoken of in the traditional fashion as a lovely pastoral recreation, when as a matter of fact it is a tedious job. We all hated it. We saw no poetry in it. We hated it in summer when the mosquitoes bit and the cows slashed us with their tails, and we hated it still more in the winter time when they stood in crowded malodorous stalls.

In summer when the flies were particularly savage we had a way of jamming our heads into the cows' flanks to prevent them from kicking into the pail, and sometimes we tied their tails to their legs so that they could not lash our ears. Humboldt Bunn tied a heifer's tail to his boot straps once—and regretted it almost instantly.—No, no, it won't do to talk to me of "the sweet breath of kine." I know them too well—and calves are not "the lovely, fawn-like creatures" they are supposed to be. To the boy who is teaching them to drink out of a pail they are nasty brutes—quite unlike fawns. They have a way of filling their nostrils with milk and blowing it all over their nurse. They are greedy, noisy, ill-smelling and stupid. They look well when running with their mothers in the pasture, but as soon as they are weaned they lose all their charm—for me.

Attendance on swine was less humiliating for the reason that we could keep them at arm's length, but we didn't enjoy that. We liked teaming and pitching hay and harvesting and making fence, and we did not greatly resent plowing or husking corn, but we did hate the smell, the filth of the cow-yard. Even hosting had its "outs," especially in spring when the horses were shedding their hair. I never fully enjoyed the taste of equine dandruff, and the eternal smell of manure irked me, especially at the table.

Garland wrote primarily of the pioneer conditions which, somewhat modified, are still a feature of the lives of many farmers. But he was writing of early generations which had not had their best stock drained away into the cities, and of times when the deadly effects of hardship and monotony had not yet been felt. A somewhat different aspect of rural poverty, its slack intelligence and devastating narrowness,

are emphasized in a short narrative by Edmund Wilson¹² of the life of a woman who finally became a shopkeeper in Greenwich Village, New York City.

I went down Oklahoma where my father was—my father is a doctor—I don't know if he ever knew how to give anything but calomel but he certainly gave plenty of that—and the whole community down there got to be practically dependent on him—he learned by experimenting on them, too. . . . The country is really beautiful, they have all these yellow pines and what they call iron-wood that turns first brown and then yellow and sort of a henna-colored soil—but the people don't do anything with it. Where we were, the Choctaw Lumber Company had come in and put them to work—somebody has to do something with them—they'd just set and rock, otherwise. Each family owns a cow and if they're ambitious they have a "hawg" and they'd let it go at that. I tell you, you have to go down and live among them to believe that there are such people! They won't talk—all you can get out of them is "yes" and "no" and "Ah reckon." But they watch everything you do—the first morning I was there all the women hung around and watched me get washed. You ought to have seen their faces when they saw some of the things I did—they thought I was outlandish—they didn't have to do that, see! And when I brushed my teeth! They couldn't make out what it was. They don't have any toothbrushes down there—they use snuff-sticks instead. And the women would watch me from the house across the street when I got undressed at night. The only way they know to amuse themselves is to play craps—that's their diversion. My father had a mechanical piano brought down to try to entertain them and you ought to have seen the crowd around the house every night—they just stood there and stared with their mouths open. They'd never heard any music before—only just these old fiddles they have.

They played it every night for a month and I couldn't stand it any longer. Finally I walked out one night and said, "Golly! I can't stand this tinned music any more!" They looked at me real sore and said, "Didja ever hear any better?" Later on, they had pictures there—in the same room that was the school and the church—but most of the older people didn't go—that was kind of new, see. . . .

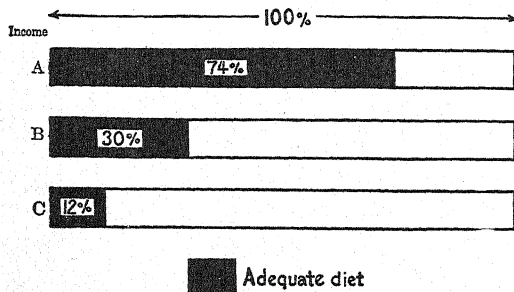
And they couldn't understand why I read books—if they saw me reading a book, they'd put me through a regular cross examination—they'd want to know what it was and why I wanted to read it. They didn't even read the Bible—they figured they wouldn't know about it. . . . I used to go out for long walks with a book and that made them very suspicious—they wanted to know why I wanted to go out for a walk alone.

¹² "The Road to Greenwich Village," *New Republic*, Vol. XLII, p. 215 (April 15, 1925). Quoted by permission of the publishers.

Anyone who knows the rural life of much of the border hill country between the North and the South will recognize Wilson's picture as true. It is overdrawn if used as a generalization concerning life on the poverty level in rural districts everywhere, but many of its features are true of communities in every part of the country where unfortunate circumstances of soil or climate have prevented progress. In the Jersey pine barrens, in the hills away from the fertile valleys of New York, Ohio, and Indiana, as well as in many other places similarly situated, like conditions will be found.

BAD CONDITIONS OF PHYSICAL LIFE

Unwholesome Food. Poverty not only prevents the finer developments of life, but also often destroys the roots themselves—physical and mental health. Food is almost certain to be poor in quality and limited in variety, a few coarse items endlessly repeated. Refrigeration is difficult at all times in the South, and next to impossible in summer everywhere. This tends to restrict diet to dried, canned, and salted foods which are slow to spoil; and sometimes to stale and half-decayed meats. Ignorance prevents proper cooking and wholesome combinations, so that starchy and greasy foods, such as potatoes, cornbread, and the fat cuts of beef and pork, are common. Among



Tuberculosis and other diseases caused by under-nourishment are unavoidable when people have not enough income to buy decent food. (From *Bureau Publication No. 110*, U. S. Children's Bureau.)

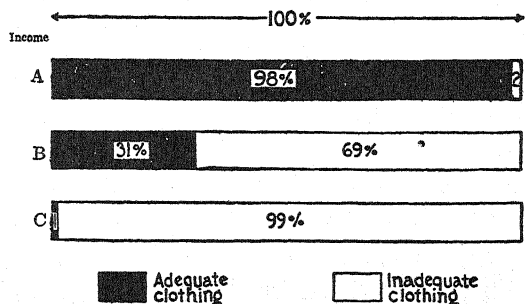
the very poor even such foods are hard to get, and the diet becomes irregular as well as ill-balanced. Drinking water is often contaminated, and in consequence frequently causes typhoid fever and other dangerous filth diseases.

children in rural regions shows a direct relation between income and adequacy of food. For example, a recent investigation in a Kentucky

Inadequate Diet of Children. As might be expected, the diet of

mountain blue-grass county of average farming quality classified the farms in the county as ranging from good to poor and the families as falling into three income groups. Group A included families whose ability to provide adequate food, shelter, and clothing could not be doubted; Group B, those less certainly able to provide for themselves; and Group C, those unquestionably poor. Two hundred and fifty-six children, between two and eleven years of age, were examined for indications of inadequate diet. The results are shown in the diagram which appears on page 52.¹³

Inadequate Clothing. In poverty flimsy and insufficient clothing still further saps health. The woolen coats and furs of the well-to-do, the thick-soled shoes which keep out cold and damp, are out of reach of the poor. Cheap substitutes, worn until they are ragged, furnish their ordinary protection against the weather to which they are continually exposed. In the investigation just mentioned, the Kentucky mountain children in poor families were found to suffer even more from inadequate clothing than from inadequate food.¹⁴ This is shown in the diagram here.



Flimsy clothing goes with low income. (From Bureau Publication No. 110, U. S. Children's Bureau.)

Housing Evils. The houses of the rural poor are generally so ramshackle and leaky as to afford scant protection against winter winds and snows, and against the dampness and malarial insects of summer. The dwellings are often pieced together with a few rough boards or logs containing many knotholes and cracks. On the Western prairies, the houses are built sometimes of sod piled up into walls, or are merely caves dug in the side of a hill, the openings covered with sods and sticks. If a region is fairly prosperous and has been settled a few years, one can usually see not far from such squalid hovels a few

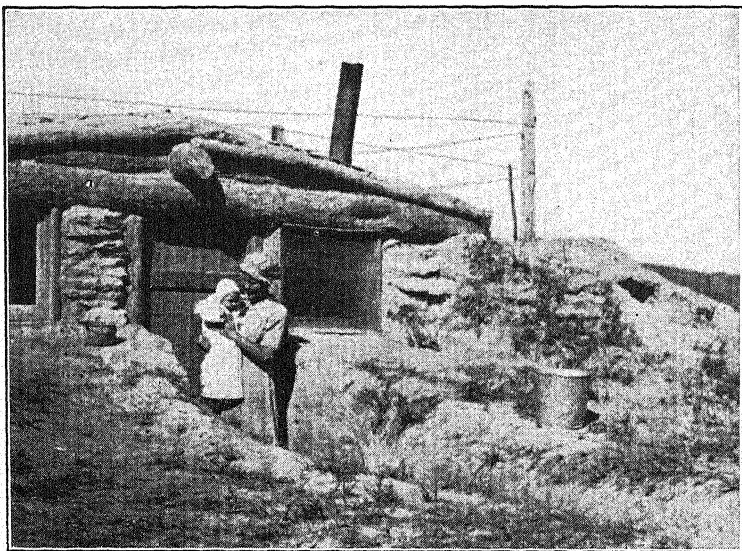
¹³ *The Nutrition and Care of Children in a Mountain County of Kentucky*, Children's Bureau, United States Department of Labor, Publication No. 110, 1922, p. 30.

¹⁴ *Ibid.*, p. 37.

respectable cottages. But the traveler in remote districts of the mountain and prairie regions finds such marks of progress discouragingly scarce.

Crowding, darkness, and lack of ventilation, which are usually thought to be evils of the city slum, are common among the rural poor. Scarcity of building materials, inadequacy of heating facilities, and ignorance of the laws of hygiene cause the family to huddle together in one or two rooms for cooking, eating, and sleeping. In a report on a rural county in Montana appear the following typical remarks:

Small and crowded houses are the rule rather than the exception in the area studied; and this despite the fact that the majority of the people have



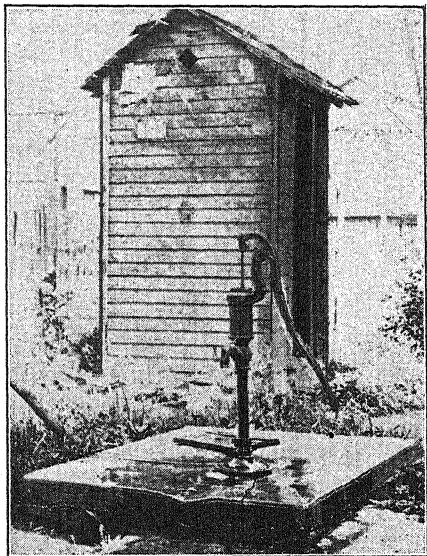
Will a youth spent in these surroundings be more likely to develop in this infant the qualities of Abraham Lincoln than to stunt its physical and intellectual growth? (Courtesy U. S. Children's Bureau.)

high standards in regard to housing and sanitation. The scarcity of lumber and the difficulty of getting building materials, the dearth of masons and carpenters, the great distances from railroads and markets, the high cost of transportation, the lack of ready money, and the pioneer attitude that to

"do without" things is a part of the homesteader's lot—these factors combine to explain the small house and the inevitable crowding. . . .

In the breaks (land broken up by rivers and creeks) nearly every one lived in a log house. Elsewhere, the prevailing types were divided about evenly among the dugout, the tar-paper shack (a light frame structure covered with tar paper to keep the wind out), the sod house (made by cutting oblong chunks of sod and piling them on top of one another to form the walls), and the gumbo houses (made of the fine gumbo clay so common in the area and much like the adobe houses found farther south).

There were some houses made of stone, which in some instances had been quarried from the buttes on the homestead; and a few frame houses of the type common to the farms of the Middle West—plastered and ceiled inside and probably more comfortable than the other types, though not nearly so attractive in appearance. Often a house would combine several styles—would be part dugout, part sod, and part log; or a combination of stone and dugout; or part sod and part tar-paper shack.¹⁵



Frequently wells like this one are polluted. Even when they are clean, what opportunities do they offer for bathing and general cleanliness? (Courtesy U. S. Dept. of Agr.)

Unsanitary Conditions. A body undermined by unwholesome food and weakened by the exposure that occurs whenever clothing is inadequate and housing is poor becomes an easy victim to disease. And homes such as those described above are apt to be still more dangerous to health because of the presence of germ-producing conditions

¹⁵ Viola L. Paradise, *Maternity Care and the Welfare of Young Children in a Homesteading County in Montana*, Children's Bureau, United States Department of Labor, Publication No. 34, p. 61.

near by. Among the most common evils of this sort in rural communities is a lack of sanitation and drainage. Although modern plumbing is never found in remote sections, methods do exist at times whereby even in a country district sewage can be disposed of adequately and a cleanly environment produced. But investigators in several sections of the country have discovered lamentably inadequate sanitary facilities and in consequence many filthy diseases.

A government report on conditions in one section states:

Unfortunately even adequate screening does not insure freedom from flies. Where there are children running into and out of the house, the screen door is only a slight protection. Moreover, when a house is poorly constructed, or in the case of log houses, when the mud chinking falls out, flies enter through the cracks. Some houses, immaculately clean and well screened, were infested with flies. In the homes which were not screened, the flies during the hot summer were a great and constant nuisance. The infrequency of sinks aggravates the fly problem, for many of the women throw the waste water out of their doors. The unscreened homes have other intruders to contend with besides flies. In warm weather, when windows and doors must be kept open, the chickens and pigs avail themselves of the housewife's unwilling hospitality and in spite of much shooing and chasing make themselves quite at home, especially on the sod floors.

Causes of Unsanitary Conditions. To trace the causes of poor health conditions is in itself a problem. One cannot always attribute them to lack of income, for in many cases a moderate amount of effort would remedy the situation. In the prairie districts there is a genuine lack of lumber for construction, and high winds frequently sweep away insecure buildings. In the drier parts of the country, there are insufficient rivers to float away drainage. But poverty is the fundamental cause. If the farmer had any surplus means and if the unending demands of farm life left him time to spend upon other than immediately pressing problems, he might learn about the dangers of faulty drainage and pursue the simple methods of constructing cess-pools and sewers. Meanwhile the evil exists.

Slim Medical Facilities. When diseases occur, as they must under the conditions described above, the family in a secluded region is usually far from any doctor or hospital. A family on the poverty level is not willing to incur the expense of a distant doctor except in extreme cases. When an illness has reached alarming proportions,

conditions of travel often prevent a physician who is called belatedly from reaching the home on time. A father or a neighbor will have to ride over many miles of rough and perhaps impassable roads, flooded with rain or blocked with snow, in order to reach a doctor who may be away on another visit when the messenger arrives. The laborious road must then be retraced; and meanwhile the patient suffers and perhaps dies.

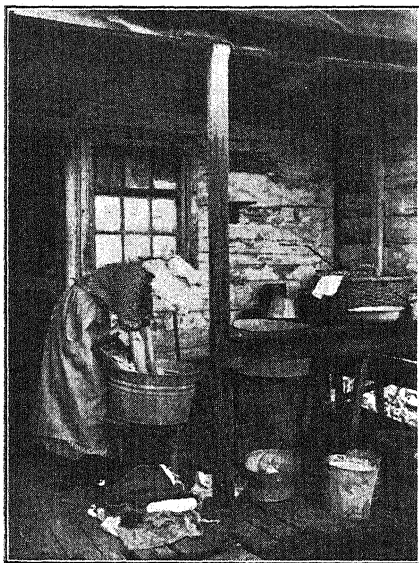
Practically all rural investigations reveal the utter inadequacy of medical facilities. A survey of a county in Georgia showed only seven physicians for 12,000 people. Thus each physician was intrusted with the care of 1,700 persons, as compared with 726 persons per physician for the United States as a whole. Another investigation showed that an area of 5,500 square miles in Montana contained not a single hospital and only three registered physicians. Less than one-third of the families lived within ten miles of a physician, and more than one-third were over twenty miles away. Ten families were from fifty to one hundred miles from competent aid.

The family and willing neighbors usually do the best they can when sickness comes, but such aid is seldom efficacious and frequently positively dangerous. Besides, secluded rural areas are totally unequipped with necessary medicines or with facilities for nursing. The inevitable result of such conditions is a high death-rate.

BAD WORKING-CONDITIONS

Woman's Work at Home. The work done by women in the country varies somewhat in accordance with the traditions of nationalities and other groups. In general, American-born husbands object to their wives' doing hard labor in the fields. But even so the mother is tasked with work that keeps her busy "from sunup to sundown." The sort of work she must do is generally monotonous and unsystematized, and is of course without any restriction of hours. Its consequences are seen in the rapid changes which come over the face and manner of a country girl within a few years after her marriage. Rising perhaps before dawn in the bitter cold, she must make fires, attend to part of the farm animals, and get breakfast for a family of laborers. The responsibility of preparing the winter food supply is also hers. She must cure the meat, gather and preserve fruits and vegetables, and perhaps even make soap. In addition she must attend

to the washing, churning, sewing, and sometimes even to the weaving of clothes. Her household tasks alone are sufficient to stoop her shoulders and the coming of night finds her unspeakably weary, yet busy with a hundred petty tasks. When children come to the home, the mother must not only care for them but must also find a way to stretch the scanty income of the family to cover food and clothing. She also bears the burden of worry about their future. Her face clouds at the sight of children who are without the means of health and happiness.



Man works from sun to sun. Woman's work is never done." (Courtesy U. S. Dept. of Agr.)

Heavy Lifting and Water-Carrying by Women. Overwork and heavy lifting are frequent causes of permanent injury to women. Investigators in one state found such duties as "carrying heavy milk pails . . . hanging up meat that was heavy . . .

lifting tubs of water . . . tossing corn on wagon . . . carrying water . . . big washings." One of the hardest daily tasks allotted to women is the carrying of water from the spring. It is rare indeed to find a rural home of the poorer class with water piped inside. A study in one section showed that only two families out of 463 were supplied with running water. Over half of the families had no pump, and were obliged to dip water from a spring or river, or draw it from a well, often without the aid of a windlass or pulley. Only a few women had sinks; all but nine out of 463 had to carry their waste water out of the house. Such a task is laborious at any time, especially on wash days.

Women's Work Afield. Among a large number of the immigrant families who till the great expanses of the Northwest, it is not uncom-

mon to see women engaged in practically all farm tasks. Among American-born families, the woman must add at least milking and poultry-raising to her household tasks. A rural family must be well on the way to prosperity before it can spare a woman entirely from



This mother is sparing the strength of her children. Who will take care of them when she is prostrated by overwork?⁹ (Courtesy U. S. Dept. of Agr.)

assisting in farm labor in the fields during the harvesting seasons. Besides, it is customary for the poorer women to hire out as laborers on the fields of others during emergency periods. The cotton crop in Texas, for example, demands the labor of women as well as children. In each county covered in a recent study more than half of the white mothers and 85 per cent of the Negro mothers had done field work at some time during the preceding year.¹⁶ Such work requires many hours away from home, hurriedly prepared meals, and is a tax on the mother's strength. And the majority of the mothers who did field work had children under six years of age.

Child Labor Generally Allowed on Farms. The laws against child labor in most states contain special exemptions for farm work. In

¹⁶ *The Welfare of Children in Cotton-Growing Areas of Texas*, Children's Bureau, United States Department of Labor, Publication, No. 134, 1924.

some states the laws merely specify a certain minimum number of days a year that a child must attend school. Several reasons explain such exemptions. In the first place, it would be hard to enforce an absolute prohibition of agricultural labor for children. Such work usually begins at home in simple, easy chores, and no one would deny that in moderation such work is beneficial to a child. At the same time it is difficult to set limits to the amount of work that a father shall require of his children, and no way of dealing with cruelty in such respects is known except by special complaints to boards of health or other authorities. In the country, of course, supervision is next to impossible.

In addition, it is hard to draw a line between work done at home and work done on other farms. At emergency periods, such as harvesting and thinning-out, most farmers aid one another without specific pay. Because of this practice it is easy to engage in work for pay on a distant farm during the special periods when large numbers of extra laborers are required. To a poor family a few dollars earned by the children are so valuable that it would be almost impossible to prevent the parents from sending their children away on such tasks. Many fathers believe that labor of this sort is beneficial to the child, and within limits they are perhaps correct in their belief.

But one has only to look at the extreme cases to see that farm labor for children is frequently carried beyond any desirable limits. It requires absence from school over long periods of time; and when a child of eight or nine is forced to work from dawn to dark with bent back and straining muscles in an open field baked by a blazing sun or wet with freezing slush, outdoor labor has been carried far beyond what can by any effort of the imagination be called healthful exercise.

Drudgery of Poverty Farming. The handicaps described above force both the farmer on the poverty level and his family to drudge incessantly to grub a living from an infertile patch of ground, small in size and rejected by other farmers for its inferior quality. The land is rocky and worked out in parts of New England, arid or swampy in the poorer districts of the South, and in any case ungenerous to a discouraging degree. Farm implements and farm animals are expensive to buy, and the latter are often an added burden for food and shelter. Unless the farmer owns his plot, he must struggle under a

heavy mortgage. If he is a tenant, he must pay rent from his uncertain returns. If he farms on shares, as many men do in the South, he must give the landowner perhaps half of the bale of cotton which constitutes his year's produce.

BAD CULTURAL CONDITIONS

Cultural Poverty. One of the best ways to understand rural poverty is to imagine what it means to do without most of the things that make life worth living. What are generally called luxuries are of course unknown:

theaters, concerts, beautiful homes and works of art, travel, the chance to discover congenial friends—all the finer developments of the art of living. The poor family in the country is often shut off in a thinly settled region where roads are bad and neighbors few. Because conveyances are expensive, they stay at



This man is holding a newspaper. It is not so easy for him to get hold of a few books. (C. P. Cushing. Photo Ewing Galloway, N. Y.)

home. Constant contact with the same few people breeds monotony and sometimes hatred; consequently, few opportunities exist for sociability or for gatherings of friends and acquaintances. If neighbors are near, they carry the same burdens and are limited by the same disabilities.

Higher education for the children is practically impossible; in the struggle against starvation the family needs every pair of hands from the earliest age. People who delight to call America a land of opportunity where anyone with energy and brains can rise forget that poverty tends to destroy such qualities in childhood, and serves frequently to create a weak and diseased constitution at birth.

COMPENSATIONS OF RURAL POVERTY

The Brighter Side. There is a brighter side to the life of poor people in the country. It is a most unusual community that does not have any social life in which even the poorest may join. It is an unusually miserable family in which the men and boys at least do not take an occasional afternoon off for hunting or fishing; where living together is not brightened by affection among the members. The most shiftless and ragged families often strike the observer as not unhappy; they lounge about, sing, and enjoy fine weather while it lasts without a thought about the next meal, much less about the more remote aims of life.

Pioneers. Pioneering still goes on, even though modern pioneers only venture away from settled valleys into adjacent hills or new townships, rather than into such wide and far-away new regions as were being opened up during the era of the covered wagon. These adventuresome people think of themselves as the salt of the earth, even though they are poor in the comforts of life. They do not expect to remain poor, and do not accept strokes from the whip of Fate with the crushed resignation bred by several successive generations of rural or urban poverty. For such independent souls the compensations of rural poverty are many. Passages from Garland's *Son of the Middle Border* ¹⁷ picture this brighter side of farm life.

Our discomforts had their compensations! As we came back to the house at six, the kitchen was always cheery with the smell of browning flap-jacks, sizzling sausages and steaming coffee, and mother had plenty of hot water on the stove so that in "half a jiffy," with shining faces and sleek hair we sat down to a noble feast. By this time also the eastern sky was gorgeous with light, and two misty "sun dogs" dimly loomed, watching at the gate of the new day. . . .

Our evenings were . . . cheerful. My sister Hattie was able to play a few simple tunes on the melodeon and Cyrus and Eva or Mary Abbie and John occasionally came in to sing. In this my mother often took part. In church her clear soprano rose above all the others like the voice of some serene great bird. Of this gift my father often expressed his open admiration.

There was very little dancing during our second winter but Fred Jewett started a singing school which brought the young folks together once a week. We boys amused ourselves with "Dare Gool" and "Dog and Deer." Cold

¹⁷ Macmillan Company, 1922. Quoted by permission of the publishers.

had little terror for us, provided the air was still. Often we played "Hi Spy" around the barn with the thermometer twenty below zero, and not infrequently we took long walks to visit Burton and other of our boy friends or to borrow something to read. I was always on the trail of a book. . . .

Naturally the school-house continued to be the center of our interest by day and the scene of our occasional neighborhood recreation by night. In its small way it was our Forum as well as our Academy and my memories of it are mostly pleasant.

Early one bright winter day Charles Babcock and Albert Button, two of our big boys, suddenly appeared at the school-house door with their best teams hitched to great bob-sleds, and amid much shouting and laughter, the entire school (including the teacher) piled in on the straw which softened the bottom of the box, and away we raced with jangling bells, along the bright winter roads with intent to "surprise" the Burr Oak teacher and his flock.

I particularly enjoyed this expedition for the Burr Oak School was larger than ours and stood on the edge of a forest and was protected by noble trees. A deep ravine near it furnished a mild form of coasting. The school-room had fine new desks with iron legs and the teacher's desk occupied a deep recess at the front. Altogether it possessed something of the dignity of a church. To go there was almost like going to town, for at the corners where the three roads met, four or five houses stood and in one of these was a post office. . . .

Often, thereafter, on a clear night when the thermometer stood twenty below zero, Burton and I would trot away toward the Grove to join in some meeting or to coast with the boys on the banks of the creek. I feel again the iron clutch of my frozen boots. The tippet around my neck is solid ice before my lips. My ears sting. Low-hung, blazing, the stars light the sky, and over the diamond-dusted snow-crust the moonbeams splinter. . . .

From the woodpile I was often permitted to go skating and Burton was my constant companion in these excursions. However, my joy in his companionship was not unmixed with bitterness, for I deeply envied him the skates which he wore. They were trimmed with brass and their runners came up over his toes in beautiful curves and ended in brass acorns which transfigured their wearer. To own a pair of such skates seemed to me the summit of all earthly glory. . . .

Father was always willing to release us from labor at times when the ice was fine, and at night we were free to explore the whole country round about, finding new places for our games. Sometimes the girls joined us, and we built fires on the edges of the swales and played "gool" and a kind of "shinny" till hunger drove us home. . . .

Life was not all currying or muck-raking for Burt or for me. Herding the cows came in to relieve the monotony of farm-work. Wide tracts of unbroken sod still lay open to the north and west, and these were the common grazing

grounds for the community. Every farmer kept from twenty-five to a hundred head of cattle and half as many colts, and no sooner did the green begin to show on the fire-blackened sod in April than the winter-worn beasts left the straw-piles under whose lee they had fed during the cold months, and crawled out to nip the first tender spears of grass in the sheltered swales. . . .

In herding the cattle we came to know all the open country round about and found it very beautiful. On the uplands a short, light-green, hair-like grass grew, intermixed with various resinous weeds, while in the lowland feeding grounds luxuriant patches of blue-joint, wild oats, and other tall forage plants waved in the wind. Along the streams and in the "sloos" cat-tails and tiger-lilies nodded above thick mats of wide-bladed marsh grass.—Almost without realizing it, I came to know the character of every weed, every flower, every living thing big enough to be seen from the back of a horse.

Nothing could be more generous, more joyous, than these natural meadows in summer. The flash and ripple and glimmer of the tall sunflowers, the myriad voices of gleeful bobolinks, the chirp and gurgle of red-winged blackbirds swaying on the willows, the meadow-larks piping from grassy bogs, the peep of the prairie chick and the wailing call of plover on the flowery green slopes of the uplands made it all an ecstatic world to me. It was a wide world with a big, big sky which gave alluring hint of the still more glorious unknown wilderness beyond.

Sometimes of a Sunday afternoon, Harriet and I wandered away to the meadows along Dry Run, gathering bouquets of pinks, sweet-williams, tiger-lilies and lady-slippers, thus attaining a vague perception of another and sweeter side of life. The sun flamed across the splendid serial waves of the grasses and the perfumes of a hundred spicy plants rose in the shimmering mid-day air. At such times the mere joy of living filled our young hearts with wordless satisfaction. . . .

After the planting a fortnight of less strenuous labor came on, a period which had almost the character of a holiday. The wheat needed no cultivation and the corn was not high enough to plow. This was a time for building fence and fixing up things generally. This, too, was the season of the circus. Each year one came along from the east, trailing clouds of glorified dust and filling our minds with the color of romance.

From the time the "advance man" flung his highly colored posters over the fence till the coming of the glorious day we thought of little else. It was India and Arabia and the jungle to us. History and the magic and pomp of chivalry mingled in the parade of the morning, and the crowds, the clanging band, the haughty and alien beauty of the women, the gold-embroidered housings, the stark majesty of the acrobats subdued us into silent worship. . . .

Most of the duties of the farmer's life require the lapse of years to seem beautiful in my eyes, but haying was a season of well-defined charm. In

Iowa, summer was at its most exuberant stage of vitality during the last days of June, and it was not strange that the faculties of even the toiling hay-maker, dulled and deadened with never ending drudgery, caught something of the superabundant glow and throb of nature's life.

As I write I am back in that marvelous time.—The cornfield, dark-green and sweetly cool, is beginning to ripple in the wind with multitudinous stir of shining, swirling leaf. Waves of dusk and green and gold, circle across the ripening barley, and long leaves upthrust, at intervals, like spears. The trees are in heaviest foliage, insect life is at its height, and the shimmering air is filled with buzzing, dancing forms, and the clover is gay with the sheen of innumerable gauzy wings.

From Garland's description it will be seen that battling with nature under handicaps may produce a high degree of family solidarity and individual strength of character. But such aspects of the situation have been, on the whole, magnified beyond all reason. The occasional forgetfulness of a holiday does not make up for weeks of grinding monotony.

RURAL POVERTY IS HANDED ON

Difficulty of Escape. The worst aspect of rural poverty is not the suffering it entails at any one moment, but the difficulty of escaping from it. The little we know of the millions of struggling lives on this level indicates that if the full truth were discovered we should cease to comfort ourselves with the thought that any farmer boy may rise as Lincoln did to fame. Careers like his occasionally happen as a result of exceptional ability or good luck, and it is inspiring to hold them up as models for all the youth of the country. But their occasional occurrence should not make us believe that such results are possible for most country people, hard-working and courageous though they may be.

Poverty Itself Makes People Too Weak to Resist It. The self-made prosperous farmer of today, although he began without property, usually had the initial advantages of health and opportunity. He probably came from a fresh pioneer family whose vitality had not yet been sapped by years of privation and disease; he worked to the top in a region and at a time when fertile land was plentiful. But for the present generation the rise to agricultural prosperity is harder. Those whose families have been for years on the land and yet remain

poor have grown up in an atmosphere of discouragement. Many of them, unlike the old pioneers, begin life with the handicap of poor health, mental and physical, the product of three or four generations of sickness and malnutrition.

Chance for the Strong. For those of keener mind, stronger body, and firmer will, there is always a chance, but no easy road to success. There are more schools, more railroads, machinery, and scientific knowledge than ever before, but fewer natural resources freely open for use. The way up is now a more humdrum grind, often requiring drudgery as a hired laborer, back and forth from region to region where the crops need special gangs of men, women, and children. Such a worker, unless he drags a family about with him, is usually deprived of the benefits of home life. He wanders alone, often out of a job for weeks at a time, then exhausted by spurts of arduous labor.

The more fortunate workers may find steady jobs with an established farmer. The next step, as a rule, is to become a *share-cropper*—that is, to farm some plot of ground for a fixed rental or “on shares,” giving over a certain percentage of the crop to the owner. This may be a step in advance or it may bring added responsibilities with no gain. The final rise to ownership may prove a barren victory, especially if failure after failure of crops or low prices for farm products brings a crushing burden of debt. Through debt, privation, and discouragement, poverty becomes a growing evil whose burdens increase of their own accord. Destroying as it does the very springs of ambition, poverty makes escape more and more difficult, except through the aid of an outside helping hand.

SUMMARY

Poverty is the level of living which does not provide enough goods to maintain a minimum standard of health and decency. It is easiest to measure this standard in terms of money income. About \$1,400 to \$1,800 a year was found necessary from 1919 to 1930 to keep a farm family of five above the level of poverty. When this test is applied to rural families, we find that for the country at large the average income has been less than \$800 per farm family, that over three-fourths of farm families live on the property level, and that over one-half live in the most extreme poverty.

Rural poverty means that income is insufficient to provide the bare

necessities of physical welfare, with almost nothing left over for the niceties of life. Unwholesome food, scant clothing, poor housing, unsanitary conditions, and neglect of health are the almost universal rule. Women and children as well as men are forced to work endlessly at wearing and joyless tasks. Cultural advantages do not exist. A rural community offers several compensations, but they do not make up for the worst evil of poverty—its self-perpetuating character. Poverty, by breeding ignorance and disease, generally unfits the poor for resistance to it. Partly for this reason, the initiative in bettering conditions must come from outside.

QUESTIONS AND PROBLEMS

1. Bring to class a newspaper clipping that illustrates one of the sections in this chapter. Be able to explain the connection between the news item and the section.
2. For your own information compare the expenditures of your family with those given in the government report cited on page 46.
3. State Engel's law. Test its truth by asking your parents the *proportion* of the family income that was spent for food, clothing, and rent (a) ten years ago, (b) five years ago, (c) one year ago, and (d) today. According to Engel, what *should* you discover? Report whether the result of your investigation agreed with Engel's law. If not, what conclusion are you warranted in drawing? Explain.
4. Make a bar graph (see page 52) that will show the expenditures of income given in the table on page 46.
5. If possible, bring to class a description of rural life that either agrees with that of Hamlin Garland or is in contrast to it. Be prepared to read aloud the most impressive paragraph or page in the selection.
6. What seem to be the chief reasons for unwholesome food in rural homes? Suggest remedies for the situation.
7. Describe the chief housing evils found among the rural poor. Compare with housing conditions that exist among the urban poor. Explain the chief causes of such evils.
8. Mention common tasks performed by the women and girls in the poorer rural homes. Why are such chores not done by men?
9. In your opinion, what is the most discouraging feature in farming? What is the most gratifying?
10. What seems to be the worst feature of rural poverty? Explain. By what means may a rural worker hope to avoid the danger mentioned?
(For list of Readings in the Class Library, see the next chapter.)

Chapter 5

POVERTY IN THE CITY

THE MEANING OF POVERTY IN THE CITY

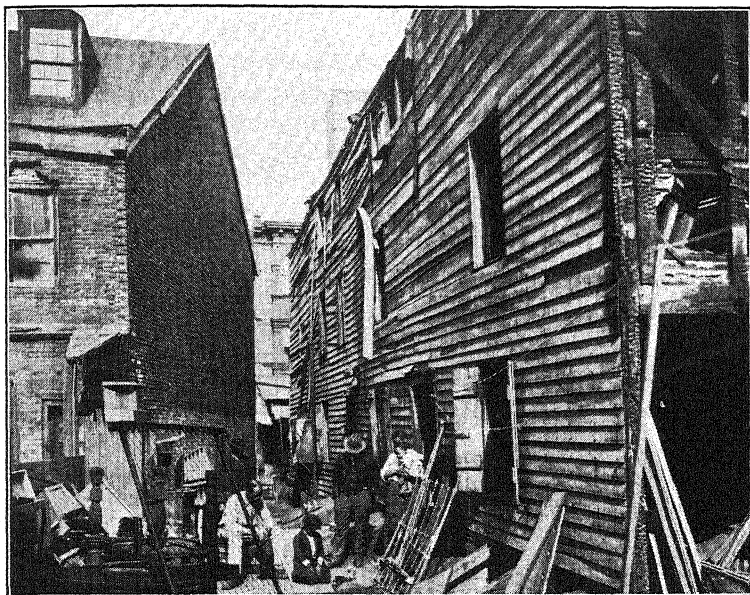
Poverty Income. Urban poverty, like rural poverty, is the level of living which does not furnish the minimum necessary for health and decent living. The best simple way to measure it is in terms of income. Many estimates have been made of the income necessary to raise an urban family of five—the standard family—above the poverty level. Since these estimates do not vary significantly in terms of purchasing power, we shall use one of the most recent.

In March, 1932, the Chicago Council of Social Agencies placed the minimum decency budget for dependent families at \$105.72 a month or \$1,268.64 a year, *exclusive of rent*. Changing this estimate so as to meet the higher cost of living from 1919 to 1929,¹ we find that, exclusive of rent, \$1,600 was the minimum necessary until 1929 to keep a standard urban family above poverty. Rent would raise this figure to about \$2,000. The council pointed out that this estimate assumed that the father contributed the entire income. If the mother worked also, there would be additional expenses for food and carfare, and the household would be managed less frugally. The estimate allowed for upkeep of household equipment, but not for original costs. It stated that the allowance for food was adequate only if the purchaser had a trained knowledge of food values in relation to costs.

The sum of \$2,000, therefore, was clearly a minimum figure. And if we recall the distinction between the upper ranges of the poverty

¹ We must deal chiefly with the decade from 1919 to 1929 because the latest complete income statistics cover these years.

level and the extreme poverty situation (page 41), we may set \$1,500 as the income below which a city family suffered extreme privation, 1919-29. When we come to deal with the depression period following 1929, we shall see that while reduction of the cost of living lowered these figures, income dropped to an even greater extent.



Urban poverty. Here even the sun and the open sky of rural poverty are lacking. With no room to play, the boy in this picture is susceptible to the evil influences of the rowdy and the criminal. (Courtesy Philadelphia Housing Association.)

Goods on the Poverty Level. We may now examine what the poverty income yields in terms of goods. In 1930 the United States Bureau of Labor Statistics made a study of the annual budgets of one hundred standard families who were each being supported by one man on the Ford Company's minimum wage of \$7 a day. The average annual income for 1929 was just over \$1,700, placing the family in the upper ranges of the poverty level. The following table shows how the average family spent its income.

TABLE 4

EXPENDITURES OF FORD FAMILIES WITH AVERAGE ANNUAL INCOMES OF
\$1,711.87 ²

<i>Item</i>	<i>Amount in Dollars</i>	<i>Percentage</i>
Food	\$556.12	32.3
Clothing	210.67	12.2
Housing	388.81	22.6
Fuel and light	103.20	6.0
Furniture	88.55	5.2
Insurance	59.16	3.4
Carfare	37.40	2.2
Sickness	64.73	3.8
Education	6.41	.4
Cleaning supplies	16.64	1.
Barber	12.37	.7
Miscellaneous	175.77	10.2

It is noteworthy that much of such income is spent for absolute necessities, and that little is left for other desirable goods. If we analyze the large miscellaneous item, we find the following expenditures: for automobile, \$76.78; for amusements, \$7.69; for travel, \$5.91; for literature, \$1.66; for religion, \$9.62; for music lessons, \$2.61; for domestic help, \$1.08; for gifts to outsiders, \$5.66; for laundry, \$4.23.³ And these are *yearly* figures! The average number of motion-picture tickets per family per year was 33; the average of plays and concerts, 1 for every 10 families; of magazines and periodicals, 10.6 for each family; of books purchased, 1 for every 5 families.⁴

It may be said that the low outlays for certain niceties are due to spending habits. But even if the sizable sum spent for automobiling were spread over the nonessential items, the amounts would be very small. *Spending habits cannot exist without income.* Furthermore, an income large enough to grant some relief from care is necessary before one can devote any energy to widening tastes. The following table, covering a large number of cases, illustrates how readily increasing income promotes diversified pleasures.

² *Monthly Labor Review* (United States Bureau of Labor Statistics), Vol. 30, No. 6 (June, 1930), p. 13.

³ *Ibid.*, p. 48.

⁴ *Ibid.*

TABLE 5

PERCENTAGE OF CITY INCOME DEVOTED TO VARIOUS PURPOSES ⁵

<i>Item</i>	<i>Income \$1,000- 2,000 per Year, Percentage</i>	<i>Income \$2,000- 3,000 per Year, Percentage</i>	<i>Income \$5,000- 10,000 per Year, Percentage</i>
Total	100.	100.	100.
Food	32.2	20.7	10.4
Housing	15.8	14.3	24.4
Transportation	15.8	16.0	8.8
Savings	4.8	10.6	14.0
Personal	8.8	12.8	15.8
Clothing	10.8	10.1	6.4
Recreation	3.2	5.3	9.5
Health	2.5	3.0	3.2
Social activities	2.1	2.2	1.6
Taxes	.9	1.7	2.5
Education	1.7	2.5	3.2
Other expenditures	1.4	.8	.2

The frequently cited argument that the poor would not know what to do with more money, or that the overworked would not know how to use additional leisure, will not bear the slightest analysis.

THE EXTENT OF POVERTY IN THE UNITED STATES IN PROSPEROUS TIMES

Individual Incomes. How many families in the United States live on the poverty level as we have described it? Since income during 1918 has been more thoroughly investigated than that of any other year before or since, we shall consider some of the facts revealed by it, and afterwards note what changes have taken place since that time, both in incomes and in their purchasing power. The 1918 study grouped urban and farm incomes together, and therefore it tells us only the *total* number of poor families. To find the number of poor urban families, we need simply to multiply this total by two-thirds, as about two-thirds of American families do not derive their incomes from farms, and as the proportion of urban families who are poor is not very different from the proportion of rural families who are poor. The following table is important.

⁵ Adapted from the *Monthly Labor Review*, Vol. 35, No. 5 (November, 1932), p. 1210.

TABLE 6

A CONDENSED SUMMARY OF THE DISTRIBUTION OF PERSONAL INCOMES IN 1918 ⁶
(excluding 2,500,000 soldiers, sailors, and marines)

<i>Income Class</i>	<i>Number of Persons</i>	<i>Cumulative Distribution: Number of Persons above the Class below</i>
No income	200,000	37,569,060
0-500	1,827,554	37,369,060
500-1,000	12,530,670	35,541,506
1,000-1,500	12,498,120	23,010,836
1,500-2,000	5,222,067	10,512,716
2,000-3,000	3,065,024	5,290,649
3,000-5,000	1,383,167	2,225,625
5,000-10,000	587,824	842,458
10,000-25,000	192,062	254,634
25,000-50,000	41,119	62,572
50,000-100,000	14,011	21,453
100,000-200,000	4,945	7,442
200,000-500,000	1,976	2,497
500,000-1,000,000	369	521
1,000,000 and over	152	152
Total	37,569,060	

Heads of Families with Low Incomes. Table 6 gives *individual* incomes, and our interest is in *family* incomes. However, we know that in 1918 there were, in round numbers, about 25,000,000 heads of families who were employed. If we assume that all of the 5,290,649 persons with incomes over \$2,000 were heads of families, there still remain 19,709,351 heads of families with incomes of less than \$2,000 a year. If we then assume that *all* of the 5,222,067 persons with incomes between \$1,500 and \$2,000 were heads of families, there still remain 14,487,284 heads of families with incomes of less than \$1,500. Finally, if we assume that *all* of the 12,498,120 persons with incomes between \$1,000 and \$1,500 were heads of families, there remain 1,989,164 heads of families with incomes of less than \$1,000. In short, even if we make absurdly favorable assumptions, and put the heads of families in the highest possible earning group, there yet remain almost 20,000,000 heads of families with incomes below the top of the poverty level. Of the 20,000,000, more than

⁶ Adapted from *Income in the United States*, National Bureau of Economic Research, New York, 1921.

14,000,000 have incomes under the minimum-of-subsistence level and therefore on the extreme-poverty level, and almost 2,000,000 of these have incomes of less than \$1,000 per year!

Families with Low Incomes. But we must remember that many families possess earning power in addition to that of the head of the family. A study of 12,000 families, however, showed that in the families in which the chief wage-earner made about \$1,000, the rest of the family raised this sum less than 3 per cent, and that in the instances in which he made around \$1,500, the other members of the family contributed only an additional 5 per cent.⁷ This sample group is large enough to be used as indicative of conditions over the whole country. This additional earning power may raise families that are just below the comfort level up into it. It may raise 4,000,000 of the 14,000,000 families referred to in the preceding paragraph from extreme poverty to the upper ranges of poverty, but it will leave the entire 14,000,000 in the poverty group, and 10,000,000 of such families below the minimum-subsistence level; it will also leave the lowest 2,000,000 of the 10,000,000 families literally destitute.⁸

These figures, as we have said (p. 71), cover the entire country. But by making a deduction of one-third for rural families, we find almost 10,000,000 urban families in the poverty group; and of these almost 7,000,000 families fell below the minimum-subsistence level, and an additional 1,650,000 families were literally destitute.

Of course, these estimates are not as precise as railway time tables. They cannot be, for the problem with which they deal is far too complex. In addition our country has been woefully negligent about devoting time and money to regular, comprehensive studies of living standards. But the figures, nevertheless, tell a story that is reasonably accurate and serves our purposes here.

Share of the Poor in the National Income (1918). A good way to find the extent of poverty is to study income distribution in terms of cumulative percentages, so that we may see the percentage of people whose incomes fall within given levels and also observe what part of the total income falls to people on each level. Table 7 provides such a study of income in 1918 covering the entire country.

⁷ See the *Monthly Labor Review*, Vol. 9, No. 6, December, 1919, pp. 29-41.

⁸ The estimates given above do not seem high, for a study in 1918 by the United States Bureau of Labor Statistics of 12,000 selected families found that 78 per cent of them had incomes of less than \$1,800 per year. *Ibid.*

TABLE 7

NUMBER OF INCOMES AT VARIOUS LEVELS IN 1918⁹

<i>Annual Income Less than</i>	<i>Cumulative Percentage of Persons</i>	<i>Cumulative Percentage of Income</i>	<i>Annual Income Less than</i>	<i>Cumulative Percentage of Persons</i>	<i>Cumulative Percentage of Income</i>
\$ 600	9.5	2.4	\$ 5,000	97.8	81.2
800	22.4	8.3	6,000	98.4	83.5
1,000	38.7	17.9	8,000	99.0	86.3
1,200	54.5	29.1	10,000	99.3	88.0
1,400	67.1	39.7	15,000	99.6	90.5
1,600	76.0	48.3	25,000	99.9	93.6
1,800	82.0	54.9	50,000	99.94	95.3
2,000	85.9	59.7	100,000	99.98	96.9
2,500	91.4	67.5	500,000	99.99	99.1
3,000	94.1	72.3	1,000,000	99.9996	95.5
4,000	96.6	77.9	over 1,000,000	.0004	.5

Changes in Distribution of Income, 1919-1929. Although no studies of income comparable to the study of 1918 income have since been made, we have sufficient data to tell us whether the situation changed materially in the succeeding eleven years. These eleven years are very significant because they cover the high-water mark thus far of American prosperity, a period when many people declared that poverty was disappearing. There are two ways in which the number of families on the poverty level may have been decreased: (1) by receiving a higher percentage of the total national income, that is, by a redistribution of income, or (2) by sharing in a general increase in the total national income, without any percentage changes in their shares. We shall now examine these two possibilities in order to determine the extent of poverty at the end of 1929. Since the cost of living did not fluctuate widely during the period of prosperity from 1918 to 1929, there is no need to change the yearly figures to put them on a common basis.

Changes in Distribution of Income, 1918-1929. In 1930 the National Bureau of Economic Research published another study of income.¹⁰ The following table brings the situation down through 1926.

⁹ From *Income in the United States*, cited before.

¹⁰ W. I. King, *op. cit.*

TABLE 8

PERCENTAGE OF PEOPLE BELOW THE \$5,000 LEVEL, AND THE PERCENTAGE
OF THE TOTAL NATIONAL INCOME RECEIVED BY THESE PEOPLE ¹¹

<i>Year</i>	<i>Percentage of Income Receivers below \$5,000</i>	<i>Percentage of National Income</i>
1918	99.3	91.31
1921	99.3	92.55
1923	99.1	90.72
1925	98.9	86.84
1926	98.9	87.27

The percentages shown in Table 8 are not completely satisfactory because \$5,000 is too high a level to start with. Nevertheless, the table indicates a slight decline in the percentage of total income falling to the lower-income earners without a corresponding decline in the numbers of such persons.

Shares of Employees in the Total Income. Most persons on the poverty level are employees, and most persons with high incomes are not. By looking at the share of employees in the total income, we secure a good picture of the share of those in the lower-income brackets.

TABLE 9

PERCENTAGE SHARE OF EMPLOYEES IN THE TOTAL INCOME ¹²

<i>Year</i>	<i>Share of Employees</i>	<i>Year</i>	<i>Share of Employees</i>
1918	53.51	1924	57.68
1919	53.68	1925	57.19
1920	57.14	1926	57.17
1921	57.14	1927	58.23
1922	57.19	1928	57.17
1923	57.70		

Table 10 confirms the opinion that the proportionate share of the poor did not increase, although the amount received was greater.

¹¹ Adapted, *ibid.*, pp. 173, 178. This estimate was based on the 1913 dollar. Therefore, *below \$8,600* instead of *below \$5,000* would be correct for the period 1918-29.

¹² Adapted, *ibid.*, pp. 80, 112, 130.

PRESENT LEVELS OF LIVING

TABLE 10

PERCENTAGE THAT WAGES AND SALARIES AND RETURN TO CAPITAL ARE OF
THE TOTAL VALUE ADDED BY MANUFACTURING ¹³

<i>Year</i>	<i>Percentage of Wages and Salaries</i>	<i>Percentage of Overhead and Return to Capital</i>
1925	51.0	49.0
1927	51.3	48.7
1929	48.6	51.4

Finally, the report of President Hoover's committee investigating recent social trends in the United States stated in 1933:

In spite of the deliberate attempts to promote the wider diffusion of wealth, there is little evidence that any radical change in the distribution of wealth has taken place in the country during the past several decades.¹⁴

General Increases in Income 1919-1929. Whatever decline has taken place in the number of poor families has been due to participation in general increases in the national income as the result of higher productivity. Table 11 gives the total national income from 1919 through 1928.

TABLE 11

THE REALIZED INCOME OF THE PEOPLE OF THE UNITED STATES ¹⁵

<i>Year</i>	<i>Millions of Current Dollars</i>	<i>Year</i>	<i>Millions of Current Dollars</i>
1919	\$65,945	1924	\$77,135
1920	73,999	1925	81,931
1921	63,371	1926	85,548 *
1922	65,925	1927	88,205 *
1923	74,337	1928	89,419 *

* Estimated.

Increases in Wages as Measure of Increase on Lower Levels. To estimate the share of the low-income groups in the increase of

¹³ Adapted from Vol. I, p. 231 of *Recent Social Trends in the United States: Report of the President's Research Committee on Social Trends* (McGraw-Hill, 1933), 2 vols.

¹⁴ *Ibid.*, pp. 231-32.

¹⁵ *Ibid.*, p. 229. For explanation of current dollars see note on p. 44.

national income, we must remember first that there has been little change in the proportionate share going to each main income level. In addition, the trend of wages is indicative, for the poor receive their incomes chiefly in wages.

TABLE 12
THE TREND OF WAGES, 1919-1929.¹⁶

Year	Average Annual Earning per Working Worker. (All Industries except Farm Labor)	Index Number of Real Wages (1913=100)
1919	\$1,272	97.7
1920	1,489	112.2
1921	1,349	123.0
1922	1,305	124.3
1923	1,399	126.9
1924	1,402	130.6
1925	1,434	128.6
1926	1,473	130.7
1927	—	133.8
1928	—	135.9
1929	—	136.4

A recent study for the National Bureau of Economic Research estimates that during the period 1922-29 real wages advanced 2.1 per cent per year!¹⁷ Real wages are what money wages will buy; they represent therefore the goods—food, clothing, shelter, and so on—a worker can purchase with his wages. Real wages are a truer indication of a worker's income than money wages.

Index Numbers. An index number, the term used in the last column of Table 12, is a mathematical device by which one can measure or determine trends, tendencies, or changes. Suppose, for example, that we wanted to measure the changes in the price of wheat between 1923 and 1927. First of all, we should take the price at a given time, say January, 1926, and make that our base, calling the

¹⁶ Annual earning figures from P. H. Douglas, *Real Wages in the United States*, Houghton Mifflin, 1930, p. 393. Index of real wages from *Handbook of Labor Statistics*, United States Bureau of Labor Statistics, Bulletin 541 (September, 1931), p. 849.

¹⁷ F. C. Mills, *Economic Tendencies in the United States*, National Bureau of Economic Research, New York, 1932, p. 553.

price at that time, for convenience' sake, 100 per cent, although the actual price, let us suppose, was 80 cents a bushel. If the price of a bushel of wheat a year earlier (January, 1925) was \$1 a bushel, that is, 25 per cent higher than the base price of 80 cents, then the index number of wheat for 1925 would be 125. Similarly, if the price of wheat in January, 1924, was 60 cents a bushel, the index number at that time would be 75; if the price in January, 1923, was 40 cents, the index would be 50; and if the price in January, 1927, was \$1.40, the index would be 175.

The preceding paragraph gives an example of a simple index number. It shows clearly that the trend in the price of wheat between 1923 and 1927 was upward. Relative index numbers, in which several items enter, are based on the same principle followed in the foregoing illustration. For example, if we wished to find the change in the price of grain between 1926 and 1932 we would proceed as shown in this table:

TABLE 13

EXAMPLE OF INDEX NUMBERS OF CHANGES IN PRICE OF GRAIN, 1926-1932

Grain (per Bushel)	1926 (The Base Year)		1932	
	Price	Index	Price	Index
Wheat	\$.80	100	\$.40	50
Rye	.50	100	.20	40
Oats	.40	100	.16	40
Barley	.60	100	.15	25
Buckwheat	.70	100	.35	50
Relative index number		5 <u>500</u> 100		5 <u>205</u> 41

Table 13 shows the change between 1926 and 1932 in the price of each kind of grain mentioned. It also shows the change in the price of all important grains—and this is of much greater social significance than the change in the price of a single grain; for the price of grain in general is a more adequate means of determining the trend in the cost of food and the tendency in the farmer's income than is the price of a single kind of grain. Index numbers are essential in determining trends in business and industry, and it is therefore

important to understand how they are made and what they mean.¹⁸

Changes in the Number of Poor Families, 1919-1929. Table 12 shows that the index of real wages rose from 97.7 in 1919 to 136.4 in 1929. This is an increase of approximately 40 per cent, and is a tremendous gain. What effect did it have upon the total number of families, urban and rural, on the poverty level? In 1918, as we have seen, 14,000,000 families were below the comfort level. Of these, 4,000,000 families were in the upper ranges of poverty, and these may well have risen into the comfort level by 1929. The 8,000,000 families just below the minimum subsistence level in 1918 may well have risen into the upper ranges of the poverty level by 1929. The 2,000,000 families having annual incomes of about \$1,000 in 1918, even with a 40 per cent rise, would still be in extreme poverty in 1929. The figures show, then, that prosperity brought tremendous gains. It raised 4,000,000 families from poverty to comfort. But it left 10,000,000 families—*over one-third of the total population*—in poverty. And of these 10,000,000 families over 2,000,000 remained in extreme poverty. If we confine our attention again to urban families, we find almost 7,000,000 urban families in the poverty group (of whom about 1,650,000 families remained below the minimum-subsistence level), even during the prosperity era.

The magnitude of the deprivation depicted by these figures makes the very term "prosperity era," which we use for the sake of convenient reference, a misnomer. Yet the fiction that everyone was prosperous during this period has not yet been erased from the public mind.

THE EXTENT OF POVERTY AND UNEMPLOYMENT DURING DEPRESSION TIMES

Depression Figures. Near the end of 1929, the United States entered a severe depression period, the causes of which need not be considered at this point. Here it will be sufficient to describe the effects of the depression upon American levels of living. We may start by examining carefully the following table.

¹⁸ Weighted index numbers, in which the various items are valued differently, are also used. In the table, for example, wheat might be regarded as twice as important as any of the other grains. It would therefore be given in the second column an index of 200 instead of 100, and in the last column an index of 100 instead of 50.

TABLE 14

GENERAL INDEX OF EMPLOYMENT AND PAYROLLS IN MANUFACTURING INDUSTRIES, 1926-1932 ¹⁹

<i>Year</i>	<i>Employment (1926 = 100)</i>	<i>Payrolls (1926 = 100)</i>
1926	100.0	100.0
1927	96.4	96.5
1928	93.8	94.5
1929	97.5	100.5
1930	84.7	81.3
1931	72.2	61.5
1932	60.4	42.6 *

* Nine-month average.

Effect of Depression upon Employment. From Table 14 we see that 60.4 per cent as much employment in 1932 as in 1926 earned 42.6 per cent as much income. This means that those persons who were actually at work for full time during 1932 suffered a cut of almost 25 per cent in money income. When we modify this by taking account of the 20 per cent drop in the cost of living between 1926 and 1932, ²⁰ we see that those at work for full time suffered a reduction of between 6 and 7 per cent in real wages. Taken by itself, this reduction was sufficient to bring several hundred thousand families from comfort into poverty, and to sink many others from mere poverty into destitution. But this result, unfortunate though it is, does not tell the whole story; 60.4 per cent employment does not mean that 60.4 per cent of all workers are employed full time. Relatively few workers are employed full time during a severe depression, and in consequence almost all suffer great reductions in earning power. Besides, those at work usually have to care for the growing number of immediate relatives who are thrown out of work.

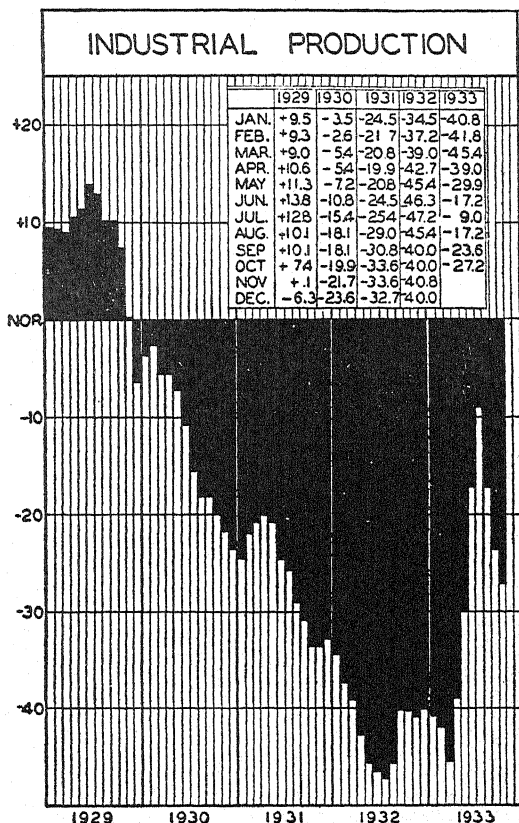
Reductions in Total Earnings of All Workers. Since the wages paid to persons at work must provide for practically the entire wage-earning class, whether busy or idle, we must examine primarily the drop in total earning. Table 14 shows that the average monthly payroll in manufacturing in 1932 was only about 42 per cent of what it

¹⁹ *Monthly Labor Review*, Vol. 35, No. 5 (November, 1932), p. 178.

²⁰ See *Recent Social Trends*, Vol. I, pp. 225-27.

had been in 1929. Modifying this figure by using the index of cost of living, we find that the real earnings of people who normally were supported by wages paid in manufacturing industries were 57.5 per cent in 1932 of what they had been in 1929. This would pull down into the poverty group all those families employed in manufacturing whose incomes in prosperous times could not have suffered a reduction of 42.5 per cent in real wages without making them poverty-stricken. If we now turn back to Table 6 (p. 72) and notice how many of the families with incomes above the poverty level in 1918 were clustered within \$500 to \$1,000 above it, we find that several million families have tasted a new poverty.

Widespread Character of a Major Depression. So far we have examined the situation in manufacturing industries alone. The following



The area in black below the line marked "NOR" (or average) on the chart expresses graphically what happens to the productive mechanism during a depression. (From *Business Bulletin*, Cleveland Trust Co., November 15, 1933.)

table shows the all-pervading character of the hardships wrought by a severe depression in major lines of employment.

PRESENT LEVELS OF LIVING

TABLE 15

INDEX OF EMPLOYMENT AND PAYROLLS, 1932 ²¹
(1929 = 100)

<i>Occupation</i>	<i>Index of Employment (1932 Nine-Month Average)</i>	<i>Index of payrolls (1932 Nine-Month Average)</i>
Anthracite mining	62.3	52.3
Bituminous coal mining	66.9	34.9
Metalliferous mining	38.0	22.6
Quarrying and nonmetallic mining	49.3	30.0
Crude petroleum production	54.8	44.7
Telephone and telegraph	80.3	83.3
Power and light	84.3	81.9
Electric railway and motor bus	76.7	69.0
Wholesale trade	78.5	68.2
Retail trade	79.2	69.5
Hotels	80.6	66.8
Canning and preserving	61.0	44.3
Laundries	81.4	69.4
Dyeing and cleaning	82.4	62.9

Effect of Depression upon Unemployment. The percentages given in Tables 14 and 15 indicate the extent of unemployment. But we need to see the stark totals to grasp the implications of the entire problem and unfortunately it is impossible to secure complete statistics on unemployment. A reliable estimate indicates that even in prosperous times there is much unemployment, as the following table shows.

TABLE 16

AVERAGE MINIMUM VOLUME OF UNEMPLOYMENT.²²

<i>Year</i>	<i>Unemployment</i>	<i>Year</i>	<i>Unemployment</i>
1920	1,401,000	1924	2,315,000
1921	4,270,000	1925	1,775,000
1922	3,441,000	1926	1,669,000
1923	1,532,000	1927	2,055,000

²¹ *Monthly Labor Review*, Vol. 35, No. 5 (November, 1932), p. 178.

²² Adapted from Vol. II, p. 478, of *Recent Economic Changes in the United States; Report of the Committee on Recent Economic Changes of the President's Conference on Unemployment*, McGraw-Hill, 2 vols.

In April, 1930, the first census of unemployment showed 3,138,000 persons out of work. Since that time,

unemployment in the industries for which fairly satisfactory indexes of employment are available has increased by almost 20 per cent. In ordinary times it is assumed that many employees dropped from these industries may find employment in other occupations, but the depression of 1931-1932 has been so severe that it is inconceivable that this shrinkage in employment could be absorbed when all lines of industry were undergoing severe curtailment. . . . Careful computations upon the basis of the incomplete available data have shown a rising volume of unemployment since the employment census of 1930, probably reaching around five million by the summer of 1931, and steadily increasing until in July 1932 a possible total of from eight and one-half to ten million persons or more than 20 per cent of the gainfully occupied appear to have been involuntarily idle.²³

By the middle of 1933, unemployment totalled at least 13,500,000.

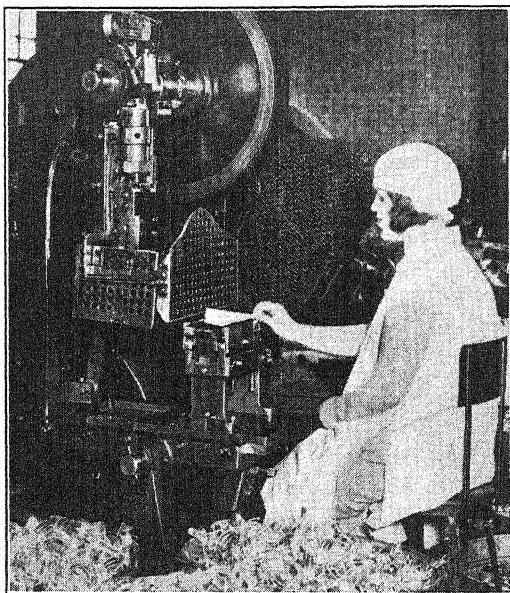
Poverty in 1933. Years will pass before the full meaning of the depression starting in 1929 can be determined. But we already know that if one-third of our population lived on the poverty level in 1929, the number of urban and rural families on this level had risen in 1933 to approximately 15,000,000 families, or over one-half of the entire population of the United States. And of these 15,000,000 families from 5,000,000 to 10,000,000 were probably destitute. This means that about 10,000,000 urban families were on the poverty level, and of these from 3,000,000 to 7,000,000 were probably destitute. These figures are substantiated by the fact that about 4,000,000 families were on the public relief rolls in the fall of 1933, according to the reports of the Federal Emergency Relief Administration.

THE EVILS OF URBAN POVERTY

Low-Grade Urban Work. Unlike many of the old-time handicrafts, modern industrial methods have slight educative value. They generally call for blind obedience and automatic habit rather than for independent thinking. The repetition of a single minute step in manufacturing, whose relation to other steps may not be understood, calls for no powers of construction or organization. It arouses no interest and gives no joy; it is deadening to mental growth. Under the best of conditions it is fatiguing to body and nerves, since the

²³ *Recent Social Trends*, Vol. I, pp. 313-14.

strain is concentrated on a single set of nerves and muscles used over and over again. The tendency of modern industrial methods is to



Such monotonous work as this woman performs for many hours each day is widespread in industry. (Courtesy Women's Bureau, U. S. Dept. of Labor.)

reduce workers to the task of tending automatic machines.

Monotony and Fatigue Prevent Betterment. A young and ambitious man will of course take time after working-hours for self-advancement, studying at night school or by correspondence to improve his general education or to fit himself for a job higher up; for there is generally a demand for capable executives in modern industry, and machinery has by no means displaced all the highly paid hand trades. For the man at the bottom, how-

ever, the necessary strength and education are often out of reach and the hard labor required to keep body and soul together leaves little energy for study at the end of the day. After ten or twelve or even eight hot and exhausting hours in a steel mill a laborer is usually not in condition to go on working at night, but is ready to drop into bed or at best to snatch an hour or so of some distracting amusement.

Living without a Surplus Increases Strain. Over many of the workers living from hand to mouth in mills and shops there always hover three dreaded shadows—unemployment, sickness, and old age. What legislation and philanthropy are doing to drive back these menaces we shall see in a later chapter, but the greater number of the poor are still in the dark of these shadows. What it means to live

without any surplus above immediate needs is difficult for a person in comfortable circumstances to imagine. He rarely has occasion to worry seriously over what would happen if his income were temporarily stopped; he has a bank account, or a little property to sell if he has a long illness, or he can at least borrow from a friend. But a family that must count each penny to provide the next meal is plunged at once into sharp and genuine distress by any reverse.

Poverty Accentuates Other Evils. Not only does poverty leave one unprotected when troubles come, but it also makes troubles far more frequent and severe. Constant fear for tomorrow lowers vitality and thus contributes to the breaking down of resistance to disease. Poverty also makes existing evils worse. How one family, more fortunate than many, lived on the margin between subsistence and utter destitution is shown by this word picture: ²⁴

Gladys Caldwell met us at the door of her four-room cottage in the mill village. It was one of a row of dingy cottages out in Poinsett, across the meadows at the edge of Greenville [South Carolina], just beyond "nigger town." I had said to one of the strikers from the Poinsett cotton mill: "I want you to take me to one of your homes where a woman keeps the house going for the wages that most of you are getting. I would like to talk to a woman about washing and doctor bills and milk, and I want to see her house. Don't take me to a widow with five or six starving children: I can find such people in New York. What I want is the story of how you normal, strong people live on your average wages of \$12 a week."

Gladys Caldwell invited us in. We sat by a tiny fireplace in her front room, which was also her bedroom. On the walls were a picture of Jesus and a calendar. In the room were a bed, a trunk, and a dresser; in the room opposite were a trunk and a bed; in the back corner room was a bed; in the kitchen were a table, a bench, and an oil stove. In the four rooms there were four chairs. The house had no plaster, no rugs, no heating stove. . . .

Here is Gladys Caldwell's story as it found its way into my notes. . . .

Yes, I have a husband and five children. I'm a weaver, at least I work in the weave room fillin' batt'ries. I get paid by the day. No, I don't mind tellin' you about how I live. It's bad enough and we mill folks have stood enough without kickin'.

I get up at four to start breakfast for the children. When you got five young 'uns it takes a while to dress 'em. The oldest is nine and she helps a lot. The others are seven, five, four, and three. What do we have for breakfast? Well, we usually have bread and butter and syrup. No, we don't get any

²⁴ From "How to Live on Forty-six Cents a Day," by Paul Blanshard, *The Nation*, May 15, 1929.

sweet milk. We get a gallon of buttermilk every day from Mrs. Rochester for twenty-five cents. The children like it; they don't take much to sweet milk. They ain't used to it.

After I've got the children dressed and fed I take 'em to the mill nursery, that is three of 'em. Two go to school, but after school they go to the nursery until I get home from the mill. The mill don't charge anythin' to keep the children there. I couldn't afford it anyway. We have breakfast about five, and I spend the rest of the time from five to seven gettin' the children ready and cleanin' up the house. That's about the only time I get to clean up. Ruby washes the dishes. Ruby is nine.

My husband and I go to the mill at seven. He's a stripper in the cardin' room and gets \$12.85 a week, but that's partly because they don't let him work Saturday mornin'. They put this stretch-out system on him shore enough. You know he's runnin' four jobs ever since they put this stretch-out system on him and he ain't gettin' any more than he used to get for one. Where'd they put the other three men?—why they laid 'em off and they give him the same \$12.85 he got before.

I work in the weavin' room and I get \$1.80 a day. That's \$9.95 a week for five and a half days. I work from seven to six with an hour for dinner. I run up and down the alleys all day. No, they ain't no chance to sit down, except once in a long time when my work's caught up, but that's almost never.

At noon I run home and get dinner for the seven of us. The children come home from school and the nursery. We have more to eat at noon. We have beans and baked sweets and bread and butter, and sometimes fat-back [fat bacon] and sometimes pie, if I get time to bake it. Of course I make my own bread.

It takes about \$16 a week to feed us. We get nearly all of it at the company store with jay flaps. They are the slips that the company gives you for buying groceries with after you've worked all day. Then you can get your groceries right away and don't have to wait until the end of the week for your pay. If we didn't have 'em some of the people would starve before the end of the week shore enough. I get my butter from Mrs. Rochester. She sells it for fifty cents a pound and we use half a pound every other day.

After dinner I wash the dishes and run back to the mill. We don't have any sink but there's a faucet with runnin' water on the back porch and a regular toilet there, too. You can see we have electric lights, but we don't have any heatin' stove. I cook with an oil stove and we have these two fire-places.

When the whistle blows at six I come home and get supper. Then I put the children to bed. There's a double bed here and a double bed in that other room and a double bed out in the back room. That's for seven of us. The baby's pretty young. I 'spose all of the children 'll go into the mills when they get a bit older. We'll need the money all right. Yes, my father and mother were

mill workers, too, and they're still livin' and workin'. He gets \$18 a week and my mother gets about \$3 a week for workin' mornin's. There was four of us children in the family. My husband's father and mother worked in the mill, too.

We've moved five times since we was married—that's eleven years ago. It don't cost much to move when you move a little way. . . . They ain't nothin' in movin' from one mill to another in the long run. When we moved here from Woodside, just over the fields there, it cost us \$2.50 a load for the two loads.

I rode around right smart when I was single, but I ain't been on the train more than once a year since. My husband reads a book once in a while but I don't get time. I went through the third grade in school and then I went to work in the mill. I was nine years old when I started work at Number 4 in Pelzer. My husband didn't go to school neither but he managed to pick up readin' and he reads books. Yes, we take a paper.

When supper is over I have a chance to make the children's clothes. Yes, I make 'em all, and all my own clothes, too. I never buy a dress at a store. I haven't no sewin' machine but I borrow the use of one. On Saturday night I wash the children in a big wash-tub and heat the water on the oil stove. Then I do the week's ironin'. I send the washin' to the laundry. I just couldn't do that, too. It costs nearly \$2 a week. Our rent in this house is only \$1.30 a week for the four rooms and we get water and electric lights free. •

I always make a coat last seven or eight years. My husband gets a suit every two years but he ain't had one for the last six years. He got an overcoat about four years ago. Things have been pretty hard. I like the movies but I haven't been to one in about six years now. Not since the children was young.

Maybe my children ought to get away from the mill village, but if they went anywhere they would go back to the farm and there ain't no use doin' that. The farmers haven't got it as good as we have.

I don't get time to go to church. My husband goes to the Methodist church. Most everybody goes to church here. Sunday's about the only day I get to rest any. Seems as if I just have to have a little rest then.

I press my husband's clothes. He half-soles the children's shoes and all our shoes. See those! Those soles on my shoes came from the dime store and cost twenty-five cents for the pair. He puts 'em on with tacks. I make a dress for myself about every six or seven months out of cloth I buy in town. It costs about twenty-five cents a yard.

We been lucky about sickness. The children ain't been sick at all for years. When the doctor comes he charges us \$2.50 a visit, but right now that the strike is goin' on the doctors is callin' for nothin', and the barbers is cuttin' the men's hair for nothin'. They's pretty much with the strike. . . . Usually I get to bed between ten and eleven at night.

Constant Threat of Unemployment. Even in normal times, loss of employment may be expected at any moment by the unskilled worker. His job is held from day to day or from hour to hour. He is easily replaced by any one of hundreds of others at a moment's notice. Without funds to wait or travel, without influential friends, often without knowledge of where work is to be had, he is handicapped in the quest for a new job.

The nature of present-day industry makes considerable unemployment hard to avoid. Industry is interdependent because different parts of products are made at different places. For example, automobiles may be made at one place, pneumatic tires at another. Thus if a local condition slows down the automobile industry, it will affect the tire industry elsewhere. When one firm turns men off, others will be more apt to do likewise than to take men on. In occupations such as agriculture or building there is much more work in summer than in winter. Seasonal fluctuations occur regularly. Periods of prosperity or depression are frequently general rather than local. In the future, perhaps, industrial adjustments will be so perfectly

coördinated that men not needed at one place will be used elsewhere, but today we suffer the evils of the transitory stage between that new condition and the old system of small, self-sufficient units.



It is common for a family of five or more to sleep in a single room like this, musty, dirty, and scantily furnished. (Courtesy Philadelphia Housing Association.)

Poor Food and Lodging Cause Bad Health. Loss of health is also common on the poverty level, partly because of faulty nourishment and improper bodily care. If a man comes home after a hard day's work to

quiet rest, a good dinner, and a night's sleep in a well-ventilated room, he gets into condition for another day of labor. But the low-grade city laborer who goes home to the slums or to the squalid

cottages which surround the mill enters another dreary atmosphere dangerous to health and deadening to mental growth. Large families crowded for sleeping into the same room readily contract tuberculosis and other diseases.

Bad Working-Conditions Cause Loss of Health. Much manual labor in modern industry is dangerous. In mining, poisonous gases

C. Dampness.

Health hazard.	Symptom, condition, or disease to look for.	Occupations which offer such exposure.
Dampness.....	Diseases of the respiratory passages, neuralgic and rheumatic affections.	Acid dippers; alkali-salt makers; artificial-ice makers; artificial-silk makers; auto painters; baters (tannery); beamhouse workers (tanners); beatermen (paper and pulp); bleachers; bleachery dryers; blockers (felt hats); boiler washers; brewers; brick makers; cable splicers; caisson workers; calico printers; candy makers; canners; cartridge-cup washers; cartridge felt and wad makers; cartridge shot shell paraffin dippers; charcoal workers (sugar refining); clay and bisque makers (pottery); clay-plug makers (pottery); cloth preparers; concentrating-mill workers (lead and zinc); cotton-mill workers; creosoting-plant workers; digester-house workers (paper and pulp); doffers (textile); dresser tenders (textile); drivers; dye makers; dyers; electroplaters; enamellers; explosives workers; extractor operators (soap); felt extractors; felt-hat makers; fertilizer makers; filter-press workers; fishermen; flax spinners; flush tenders (aluminum); galvanizers; glass cutters; glass finishers; glaze dippers (pottery); glove makers (leather preparers); glue workers; grinders (metals); gun-cotton washers; hair workers; ice-cream makers; lasters (shoes); laundry workers; lime pullers (tannery); linoleum makers; masons; match-factory workers; miners; mirror silverers; nickel platers; packing-house employees; paint makers; paper makers; petroleum refiners; phosphate-mill workers; phosphorus-evaporating-machine operators; picklers; plasterers; pottery workers; preparers (tannery); pressmen (oil refining); pullers-out (felt hats).

This sample page from a bulletin on occupational hazards shows about three-fourths of the jobs which were listed as dangerous because of dampness alone. (From Bureau of Labor Statistics, *Bulletin 506*, p. 14.)

and collapses of rock are of frequent occurrence, and diseases are induced by darkness, extreme heat or cold, and dampness. Factories have machinery which must be oiled and tended, and a moment's carelessness may mean the loss of life or limb. In certain industries the air contains poisonous vapors, flying particles of metal filings, stone dust, or cotton lint, which enter the lungs and contribute to the development of tuberculosis. Progress is now being made in improving health conditions by enforcing sanitary rules in places of

work, installing protective devices on machinery, and prohibiting the use of unnecessarily dangerous chemicals. But such safeguards are neither universal nor adequate.

Old Young Men. Bad conditions of work, and above all the extreme fatigue of heavy labor, make workers old before their time. In several industries a man must expect to be "used up" and comparatively helpless at the age of forty or forty-five; his wife or children must then support the family. Some industries find that young men are faster and more careful workers than older men, and employers therefore often lay off men of middle age when young men are available. Most of these men of forty have dependents, and most of them could be useful elsewhere if employed. But in any occupation it is hard for a middle-aged man to secure a new job when a younger man applies for it.

The Massachusetts Commissioner of Labor and Industries, in a survey of wages paid in Fall River, reports these hourly rates in one of the women's apparel plants:

9 employees at	10¢	an hour
1 employe at	11¢	an hour
5 employees at	12½¢	an hour
4 employees at	14½¢	an hour
5 employees at	16¢	an hour

In another plant making wearing apparel "the earnings of more than 50 percent of the women and girls employed on piece work" were as follows:

1 employe at	5¢	an hour
1 employe at	6¢	an hour
3 employees at	7¢	an hour
2 employees at	8¢	an hour
10 employees at	9¢	an hour
9 employees at	10¢	an hour
12 employees at	11¢	an hour
10 employees at	12½¢	an hour
13 employees at	13⅓¢	an hour
18 employees at	14¢	an hour
13 employees at	15¢	an hour

It has been possible for even the better shops to sell good quality dresses recently for from three to eight dollars. These wage rates offer some explanation. (From *The Survey Graphic*, February, 1933.)

Women and Children in Industry. One of the results of machinery has been to take women and children out of the home and put them to work in the factory. Cheap labor is in demand, and a large part of the industrial process does not require strength or skill. Men are often discarded in favor of untrained boys, girls, and women. School work suffers; tender bodies are stunted and weakened. Child-labor legislation has been thwarted on paltry excuses. The consciences of employers are easily soothed, especially when the women and children themselves clamor for work.

URBAN POVERTY IS HANDED ON

Urban Opportunities. Although urban poverty lacks some of the compensations of rural poverty, the lot of the urban worker is less desperate in other respects. If a person is efficient, opportunities to show merit and to rise are more numerous in the city. Free or cheap public advantages for education are available; food and sanitation are inspected; newspapers, motion pictures, and contacts with other minds exist. But in return for such advantages the worker in mine, factory, or office must often surrender fresh air and sunshine for dark, germ-infested streets, and the roomy countryside for a crowded corner in a tenement.

Urban Poverty Self-Perpetuating. The most serious evil in urban poverty is not the misery suffered at any one time, but the difficulty of rising above it. Lack of proper food, clothing, and shelter during childhood results in a weakened constitution and renders the individual unable to compete on equal footing with those who are more fortunate. Public schools may be free, so far as books and tuition are concerned, but living-expenses must be paid, and a father bowed with years of struggle finds it hard to meet such expenses during many years of schooling.

Under \$450	166.9	
\$450-\$549	125.6	
\$550-\$649	116.6	
\$650-\$849	107.5	
\$850-\$1049	82.8	
\$1050-\$1249	64.0	
\$1250 and Over	59.1	
No Earnings	210.9	
Not Reported	139.7	

Infant mortality rate according to fathers' earnings. Rate based upon deaths of infants under one year of age per 1000 live births. The death-rates are higher among families with the lower incomes. (Based on statistics from Children's Bureau, U. S. Dept. of Labor.)

If the family is in extreme want, the children are called upon while still very young to contribute to the support of the family. With heavy outside work, schooling rapidly becomes impossible; sickness comes, lessons are not studied, and dreams of college or even of the learning of a skilled trade must be given up. Working-papers are applied for, and the child begins work as an errand boy, parcel-wrapper, or machine-tender. He has joined the vast army of unskilled workers in an immense and impersonal system—a factory, a mine, a railway, or a department store; his individuality is lost in a crowd; his talents are held down to a standardized routine.

Slight Chance of Escape for the Unskilled Worker. For the unskilled worker there is usually no escape from such a job except to



Stevedores unloading cars of fruit. Millions of men are forced into this heavy type of work by circumstances over which they individually have no control. Many of these men probably have the capacity to be artists or executives. (Courtesy Pennsylvania R. R.)

another of similar character. Many factories too are isolated, especially in mountainous districts, and the worker there is generally cut off from opportunity to change a bad position for a better one. Especially when settled with a family, a man will endure much before cutting loose from a job. A certain proportion of workers, of course, the exceptionally fit or the fortunate, rise from the bottom to skilled work and prosperity. In some cities, especially in the South, most of the mine and mill hands are of old American stock. In other parts of the country descendants of old families have risen above the

poverty level into the class of skilled workmen, foremen, trained clerks, and managers. Their places at the bottom have been taken by Negroes or by recent immigrants. Of these in turn the more capable and the more fortunate gradually push upward and the rest remain bedraggled failures to help populate the slums.

Some progress, it is true, does occur, and it would be false to paint the picture too black. But it is equally false to assume that "any poor but honest boy can reach the top if he tries." The handicaps of poverty bear down so hard that help must come from other sources.

SUMMARY

Urban poverty is that level of living which does not provide a minimum of health and decency. Until 1929, about \$2,000 annually was necessary to keep a standard city family above poverty, and \$1,500 was necessary to keep them above extreme poverty. Poverty income yield insufficient necessities and almost no other desirables goods.

In 1918, if we consider urban and rural poverty, 2,000,000 families were destitute, another 8,000,000 were in the upper ranges of extreme poverty, and 4,000,000 more were just below the comfort level. The great prosperity period from 1919 to 1929 did not change the unequal distribution of income, but general increases in earnings were such that only 2,000,000 families remained in extreme poverty and only another 8,000,000 were in the upper ranges of the poverty level; about one-third of the population were somewhere within the poverty level in 1929. The great depression starting in that year wrought such havoc that in 1933 approximately 15,000,000 families were on the poverty level; of these from 5,000,000 to 10,000,000 families were destitute.

In urban areas alone, in 1918, 1,650,000 families were destitute, another 5,350,000 were in the upper ranges of extreme poverty, and about 3,000,000 more were below the comfort level—making 10,000,000 poor urban families in all. In 1929, there were still 7,000,000 urban families in the poverty group. In 1933, there were 10,000,000 urban families living in poverty, and of these from 3,000,000 to 7,000,000 were destitute.

The evils of urban poverty are low-grade, monotonous work, the strain of living without a surplus, physical impairment of men, women, and children through overwork, undernourishment, and evil working and living conditions. Such cumulative hardships con-

spire to curtail opportunity, decrease ability, and deaden ambition, so that poverty becomes self-perpetuating and improvement must come from other sources.

QUESTIONS AND PROBLEMS

1. What indications are there that increased income serves to develop and widen cultural tastes?
2. Did the progress in the fight against poverty between 1919 and 1929 result from better production or from better social organization?
3. Does the evidence indicate that a more equal distribution of wealth is taking place in the United States?
4. Was the decrease in poverty between 1919 and 1929 more or less rapid than the increase in poverty between 1929 and 1933? What may be reasons for the difference?
5. Is unemployment necessary? Have we always had unemployment since the World War?
6. Are opportunities to rise from the poverty level better in the country or the city? Give reasons. Are living-conditions in the country better or worse than in the city? Explain.
7. Compare low-grade urban and low-grade rural labor. Which is the more monotonous? the more fatiguing? Mention examples that support your views.
8. Explain two ways in which poverty lowers the efficiency of the worker. How does the story of Gladys Caldwell (p. 85) illustrate the effects of living without a surplus? Be specific.
9. Is an unskilled laborer more or less likely to be thrown out of work than a skilled laborer? Give reasons.
10. Make two line graphs depicting the statistics on page 80.
11. Mention ways in which illness, accidents, and high death-rates bring economic distress to the poor.
12. How did the Industrial Revolution bring women and children employment and at the same time throw men out of work?
13. Mention instances of child labor you have seen. In what ways is such employment harmful (a) to the child and (b) to society? Point out respects in which child labor is a complicated problem.
14. *Special report for a volunteer:* The child-labor laws of your state.
15. Show in graphic form a simple index number of the price of corn between 1920 and 1932, using 1926, as the base: 1920, 90 cents; 1921, 40 cents; 1922, 50 cents; 1923, 60 cents; 1924, 55 cents; 1925, 70 cents; 1926, 75 cents; 1928, 90 cents; 1929, \$1; 1930, 70 cents; 1931, 30 cents; 1932, 15 cents; 1933, 20 cents.
16. Prepare a relative index number of six stable commodities, providing your own commodities and prices.

READINGS IN THE CLASS LIBRARY

1. "Under the Lifting Smoke," Chase, *Men and Machines*, pp. 124-37.
- *2. "The Poor," Wells, *The Work, Wealth and Happiness of Mankind*, Vol. II, pp. 542-48.
3. "Overproduction and Want," *ibid.*, pp. 548-56.
- *4. "Family Expenditures for Different Classes of Income," Weld and Tostlebe, *A Case Book for Economics*, pp. 23-27.
5. "Standard of Living," Clay, *Economics*, pp. 303-07.
6. "The Song of the Shirt," Thomas Hood, Forman, *Sidelights on Our Social and Economic History*, pp. 226-29.
7. "Waste of Human Beings," R. E. Park, Hill, *Readings in Vocational Life*, pp. 87-91.
- *8. "Cigar Making," H. S. Harrison, Center, *The Worker and His Work*, pp. 199-207.
9. "Economic Inequality and Poverty," Patterson and Scholtz, *Economic Problems of Modern Life*, pp. 443-67.
- *10. "Economic Insecurity," *ibid.*, pp. 469-82.

Chapter 6

COMFORT IN THE COUNTRY AND THE CITY

THE MEANING AND THE EXTENT OF COMFORT IN THE UNITED STATES

Definition of Comfort. Poverty, as we have seen, is the level of living below the minimum standard of health and decency. The comfort level, on the other hand, allows not only for the physical but also for the elementary social necessities. Minimum health and decency includes opportunities for recreation, paid medical attention, carfare, and insurance without subtracting from the allowance for food, rent, and clothing. Housing for a standard family consists of four or five rooms in good repair, with running water, private toilet, bath, closet and cupboard space. Food is plain, but substantial—the cheaper cuts of meat and fish, dried beans, peas, cheese, eggs, milk, butter, oleo and lard. Clothing is of the cheapest serviceable grade, but of neat and respectable appearance. The allowance for sundries permits a daily paper and an occasional magazine, stationery and postage, movies once every two weeks, with \$5 to \$10 a year left over for excursions and other amusements, and 50 cents a week for ice cream, candy, and soft drinks. Such living required for either urban or rural families an annual income of about \$2,000 in 1929, and about \$1,600 in 1933.

As income grows a little larger, say to \$2,500 per year, real comfort begins to be possible. Enough material goods are obtainable without severe struggle to satisfy basic demands and provide a few luxuries. Work offers an outlet for creative powers; opportunity is found for education and enjoyment. But in contrast to riches

comfort does not provide freedom from working fairly steadily for a living, and many luxuries are not within reach.

Extent of Comfort in the United States. When we seek to determine the number of families on the comfort level, we face the same difficulty that confronted us when discussing poverty. The last all-inclusive study of levels of living was made for the year 1918, and even that was a study of individual rather than of family income. But from the 1918 figures we find that perhaps one-half of our families lived on the poverty level in 1918, about one-third in 1929, and one-half in 1933. This means that in 1918 about one-half of the people lived in comfort, in 1929 about two-thirds, and in 1933 one-half. For, as we shall see in the next chapter, the number of rich people is a very small fraction of the total population.

Individual Tax Returns as Measures of Comfort. Although individual incomes are not family incomes, the number of individual incomes on the comfort level is extremely significant. This number tells approximately how many men can support families comfortably without calling upon the mother or children for aid. And this may be taken as one measure of comfort, for we know that women and children work mostly on the lower-income levels. The following table deals with income tax returns for 1929.

TABLE 17
INCOMES ON THE COMFORT LEVEL ¹

Net-Income Class	Number of Returns	Simple Distribution Percentages		Cumulative Distribution Percentages	
		Of Income- Tax Returns	Of Total Taxable Income	Of Income- Tax Returns (under Class above)	Of Total Taxable Income (under Class above)
Under \$ 1,000	126,172	3.12	.30	3.12	.30
\$1,000- 2,000	903,082	22.33	6.50	25.45	6.35
2,000- 3,000	810,347	20.04	7.90	45.49	14.26
3,000- 5,000	1,172,655	29.00	18.44	74.49	32.69
5,000- 10,000	658,039	16.27	18.07	90.76	50.76
Over 10,000	374,032	9.24	49.24	9.24	49.24
Total	4,044,327	100.00	100.00		

¹ Adapted from United States Bureau of Internal Revenue, *Statistics of Income for 1929*, p. 5. *Net income* means the amount of income left after the legal deduc-

If we say that \$10,000 a year is the point at which an income passes from the comfort level to the level of riches, Table 17 indicates that about 90 per cent of all taxable incomes were below the level of riches. If we deduct from the 90 per cent the 25 per cent representing the number of taxable incomes on the poverty level (under \$2,000), we find that 65 per cent of taxable incomes were on the comfort level. As the total number of taxable incomes in 1929 represented about one-ninth of the total number of incomes in the country, *it follows that only about 7 per cent of the total number of incomes in the United States were on the comfort level at the peak of prosperity.* Using Table 17 in the same way, we find that the 7 per cent received somewhat over 11 per cent of the total national income.

COMFORTABLE COUNTRY LIVING

Differences between Urban and Rural Comfort. On the comfort level, as on the poverty level, many differences appear between country and city. Under primitive conditions of life in the open, both health and happiness were possible with few material goods. The savage dweller in a temperate country well provided with game and wild plant food, where conditions demanded activity and cunning, received in return for his labor not only food but also health and freedom from "nerves." If neither excessive cold nor barren soil made the struggle bitter, and if nature was not so bountiful as to make the savage lazy, such a man was above the poverty level in both mind and body. But in the modern civilized world a country dweller must as a rule live in a certain way and own certain things to attain comfort. In this respect urban and rural comfort are similar. The farmer no less than the factory worker must have a good productive equipment at his disposal.

The difference between the two occupations is that farming is not only an industry; it is also a domestic arrangement. The farm home is *part* of the farm. Many of the activities of farm production are carried on within the home and many of the products from the fields are consumed by the family. The activities of home and field are coördinated into a single enterprise. For these reasons the producing and the consuming sides of farm life are inextricably mingled.

tions for business or professional expenses have been made from total income—in other words, what the family actually has to spend, or save.

Accordingly we shall examine the homes of the comfortable rural dwellers, the food consumed and the amusements enjoyed as well as the work done.

Old Country Homes. Comfortable country homes of forty or fifty years ago were large frame buildings under shady trees. Set back on broad lawns far from the roadway, they had an air of complete self-sufficiency. Nor did their appearance belie the truth, for



Note the spacious dignity of the comfortable country home, with the garage and power-house at the left. (Courtesy U. S. Dept. of Agr.)

the activities of the family centered within the big rooms and were carried on within sight of the expansive windows.

Newer Homes. As fast as the old houses decay, they are replaced by new ones better suited to modern life. These later dwellings are not so rambling, for with families smaller and children away at school every extra room is an additional burden to the women who must care for it. These compact places, frequently bungalows, are tighter against the winds of winter and cooler under the summer sun. Unlike their predecessors they are apt to have running water, bathroom, electric lights, furnace, sewer, hardwood or linoleum floors, better provision for light and ventilation, and concrete foundations. Conveniences unknown before the turn of the century are part of the comfort level of rural life today. The better homes of an earlier day

were admirable for their architectural beauty, but they offered few of the comforts and conveniences we expect in a home.

Food for Country Living. Not many years ago, before the day of the concrete road and the motorcar, people who lived upon the land were limited largely to food that could be grown upon the home place or near it. In many famous dairy districts such as the hill counties of New York, Pennsylvania, and Wisconsin, frosts extend so late into spring and appear so early in the fall that slow-maturing vegetables and fruits cannot ripen in the short summer season. In the past people in such regions lived during the winter months on salt pork, home-ground flour, potatoes, and dried fruit. It was not the strain of hard physical labor alone that caused rheumatic diseases and the generally high death-rate among farmers fifty years ago; it was partly a diet poor in the saving qualities of green vegetables and fruits.

Better-Balanced Diets. In recent years there has been a steady improvement in rural diet. The hill farmer confines his efforts to producing dairy products such as milk, butter, and cheese, and to growing grains and root crops. These are sold in the market centers, and the proceeds are used to supply the farm table with fruits and vegetables grown in the tropics or in the low country. The fruit-grower who can ill afford to pasture cows on his costly soil benefits in turn by the exchange, and dairy products appear upon his table. Thus the pursuit by each locality of the type of agriculture for which it is best suited benefits everyone. Not in any respect, perhaps, has commerce contributed more to the pleasure and health of the race than in varying and improving the human diet. The change has been partly due to the dietary advice now provided by various government bureaus.

RURAL WORK ON THE COMFORT LEVEL

Beneficial and Varied Character of Country Work. Whatever may be said of farming as an occupation, it is generally recognized that farming is better suited to the human body than most other kinds of work. The factory worker is apt to be a machine-tender and to be forced to bend for long hours above a moving machine monotonously repeating a limited set of motions. At such a job he uses almost none of his mental powers and only a few of his muscles. He is confined indoors while at work, and generally his family life goes

on far removed from his occupation, also in cramped, stuffy quarters. A farmer's work, on the other hand, at least requires brains for planning and the use of most of his muscles. He is both a worker



Modern farming presents an admirable mixture of physical labor and mental work, especially in the skillful operation of machinery for cultivation. In addition, the farmer works in the open air. (Courtesy Caterpillar Tractor Co.)

and a business man. He plans and directs and he also labors. These are the jobs done in the course of a week's activities on a dairy farm in the month of June. The farm is located in Wyoming County, New York. The equipment consists of twenty cows, tractor, team of

horses, pigs, sheep, and chickens besides the usual quota of machinery for carrying on the work of mixed farming:

Milking and feeding cows	Spraying fruit
Caring for milk	Planting winter potatoes
Taking milk to market	Placing new concrete
Caring for work animals and tractor	Repairing motors
Fitting ground and drilling seed	Making small repairs on fences and buildings
Harvesting first crop of alfalfa	Caring for pigs, sheep, and chickens
Harvesting peas	
Gardening	

Hoing corn or plowing a field may be monotonous, but the work usually occupies only a short time; a new and different job needs to be done tomorrow or next week, and as a rule this is true for all the workers on the farm. In addition, farm work changes with the changing seasons. In spring the land must be made ready for planting—plowing, harrowing, and fertilizing are necessary. Then the planting has to be done. As the crop springs up, it must be hoed and cultivated to keep it clear of weeds and to keep the soil loosened and free. In midsummer, hay must be cut and stored; later, grain and fruit must be harvested. Fall sees plowing for spring begun, and winter furnishes a time for tree-pruning and woodcutting, the repairing of fences, machinery, and barns, the careful tending of stock and planning for the new year. All in all farm work is varied, yet each task is repeated with sufficient frequency to train the workers. At its best the work calls out the fullest capabilities of men.

Women and Children at Work. A farm woman is beset by problems, but the problems are those of a woman with a real place in the world. Mistress of a home which is the operating center of the productive unit—the farmstead—she is in a situation that could scarcely be bettered, if she cares to bear a significant part of the common burdens of mankind. She not only controls the family budget, but also occupies an essential part in the producing activities of the place. On the other hand a city woman, if she has any touch with the productive world, has it apart from her home life. In a sense employment is the enemy of her family, not its unifying force.

In many ways country children too have a better chance than city children. They learn to help with real work—the boys in barns and fields, the girls in kitchens or sewing-rooms. Freedom and space

surround them and they have interesting activities to carry on from morning until night in farm and house, in garden, orchard, and field.

Such Work Impossible on the Poverty Level. The foregoing type of farm work presupposes the conditions necessary for the comfort level, conditions to be discussed fully later on: an adequate area of fertile land; nearness to markets; a favoring climate; and an advanced state of the industrial arts. If such conditions are lacking, the comfort level is difficult to attain and the family will be found on a lower level of economic life. The home will be a shack or hut with little furniture or decoration; the food will be limited and confined to the poorest quality; labor will tend to be drudgery; and because such work yields small returns the level of living will fall lower and lower until the family will be in that indefinite borderland between destitution and independence that is so common in every community. A family in this condition is the easy prey of every disease and vice known to rural life.

SOCIAL AND EDUCATIONAL LIFE ON THE RURAL COMFORT LEVEL

Amusements and Culture. Rural amusements, when country life is on the comfort level, have been deeply affected by the coming of improved roads and the automobile. Improved transportation has brought the farm closer to the city than farms have ever been before. For the first time rural life has become community life. Agencies such as the telephone, inexpensive magazines, and the radio have also enriched country life. The farm family can now enjoy city amusements. A village must be small indeed that does not have a church and a motion-picture show. And a home must be poor indeed which does not have a phonograph or a radio.

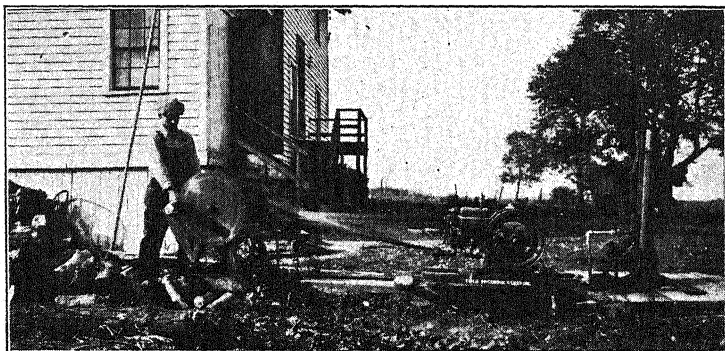
The coming of new kinds of amusements has been a distinct cultural gain to the country dweller. It has given him the advantages of city life without the crowding of that life and without the monotony of its kind of work. Country dwellers on the comfort level are no longer backward; they know the latest fashions through the magazines; they hear political speeches over the radio; they see and hear the doings of the world at the "talkies."

Educational Transformations. One reason rural education has been backward is that rural life has always been much simpler than

city life and has therefore required less preparation. In a simple rural community where most of the tasks are done by hand and where most of the processes are carried on by methods passed down from father to son, little book learning is necessary so far as work is concerned. But new methods of production in agriculture, different kinds of amusements, and new relations between country and city have changed the situation and have made necessary an improved rural educational system. Although only a beginning so far, the movement for better country schools is under way.

The little red schoolhouse described in the literature of nineteenth century America has been greatly overpraised as an educational institution. It was sufficient perhaps for pioneer needs, but it lacked the most elementary educational devices we now think necessary for training children. No other comment need be made upon its limitations than that one teacher was expected to provide instruction for all children between the ages of six and twenty.

Consolidated Schools of Today. Along with the automobile and hard roads came in many places free transportation for rural children



With this rapidly revolving saw, tough wood can be cut in a fraction of the time required when using an axe. But if the man is not skillful, he may lose several fingers or even his arm. (Courtesy Internatl. Harvester Co.)

from their homes to centrally located schools. Consolidated schools are far better than the old schools in many ways. They can provide specialized education to meet the varying needs of the pupils. They can have teachers for children of different ages and even of different capabilities. They can offer a greater variety of training and can assist

in adult education. They can also provide courses in agriculture and home management.

Machinery Calls for Training. Machinery is rapidly transforming the methods of farm work. Tractors prepare the soil; other machines for cultivation and even more complicated ones for harvesting are coming into use. Dairy farms use milking-machines, wood is sawed by power, and most of the processes that had to be done a generation ago by sheer physical strength can now be performed with ease by machinery. Farm work need no longer tax strength and endurance; it requires rather skill and intelligence. And intelligence can be developed best by an educational system which aims specifically at that end. Work on the farm without "going to school" is no longer sufficient. In addition to improvements in elementary education, rural high schools now offer specialized courses in agriculture and home economics, and agricultural colleges for training scientific farmers have multiplied.

LIVING ON THE COMFORT LEVEL IN THE CITY

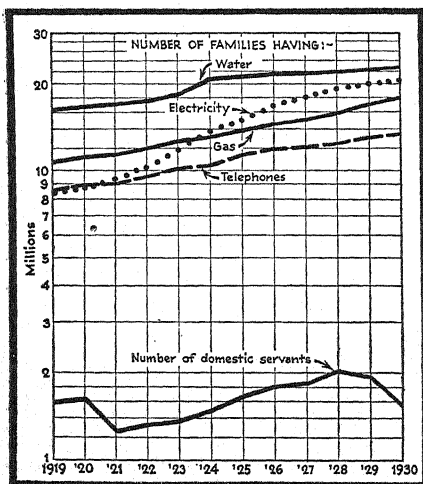
The Middle Class. Above the unskilled laborer in a large factory are foremen and skilled artisans of various sorts—machinists, carpenters, and electricians, as well as office workers, clerks, bookkeepers, and stenographers. They in turn are directed by petty officials, sales and advertising managers, and heads and subheads of departments. Experts are fitted in as auditors, attorneys, and the like, or are consulted when necessary by payment of a special fee. In the town or city are doctors, clergymen, and schoolteachers working as private professional men or women or for business houses or municipalities. Banks, shops, restaurants, laundries, and other small enterprises are on the outskirts of the factory districts and are scattered through the residential streets. Most of the workers who carry on such activities make up the large middle class in our urban economic life. Such workers, like the prosperous farmer, are usually on the comfort level, because of the quality of work they do and the quality of goods they receive for it.

Better Foods. One of the important considerations in determining the level at which Americans live is the kind and quality of the foods they use. Important changes in diet have taken place in recent years, the shift on the whole indicating an increase in well-being.

A few years ago the ordinary diet for an American worker consisted of heavy foods, largely meat and pastry. This diet was intended to sustain a man through the strenuous labor of a long farm day. To a city worker whose task is to bend above a machine or a desk rather than to handle a plow or a pitchfork such food becomes a menace. In recent years a large reduction in the consumption of meat and pastries has changed in favor of a diet made up largely of cereals, vegetables, fruits, and sugar. More high-priced foods are bought and these are used in more expensive ways. The present diet is also more diversified than ever before. Especially notable is the increased use of fresh fruits and vegetables. Without question, more

articles of different kinds are kept in the pantry. The diet has changed for the better for families on the comfort level.

Changes in the Use of Manufactured Articles. Throughout the whole population of America great changes have taken place in the use of goods. Such shifts affect significantly the kind of life that is led. Our dependence on machinery and the power which moves machines is notable not only in factories and farms but also in the home. For example, the output of electrical household appliances, which is estimated to have had a total value in 1914 of less than \$3,500,000, had by 1925 increased to a value of over \$75,000,000.²



Mechanical contrivances have brought every convenience of the city to the comfortable farm home, and have relieved many persons of the heavy duties accompanying domestic service. (From *The Business Week*, June 1, 1932.)

Nearly 4,500,000 electric washing machines were sold between 1923 and 1927—an impressive figure when we remember that there are less than six times that many families in the United States. The

² Data for these statements may be found in *Recent Economic Changes in the United States*, Vol. I, pp. 56 et seq.

LIVING ON THE COMFORT LEVEL IN THE CITY 107

radio sets in use grew from some 60,000 in 1922 to almost 17,000,000 in 1932. The installation of stationary bathtubs goes on at the rate of approximately 1,000,000 every year. By 1927 the consumption of water in leading American cities was four times as great as in the leading cities of Germany and Great Britain. The registration of automobiles runs as follows:

TABLE 18
AUTOMOBILE REGISTRATIONS, 1922-1932 ³

<i>Year</i>	<i>Passenger Cars</i>	<i>Trucks</i>
1922	10,864,128	1,375,725
1923	13,479,608	1,612,569
1924	15,460,649	2,134,724
1925	17,512,638	2,441,709
1926	19,237,171	2,764,222
1927	20,219,224	2,914,019
1928	21,379,125	3,113,999
1929	23,121,589	3,379,854
1930	23,059,262	3,486,019
1931	22,347,800	3,466,303
1932	22,421,150	3,468,303

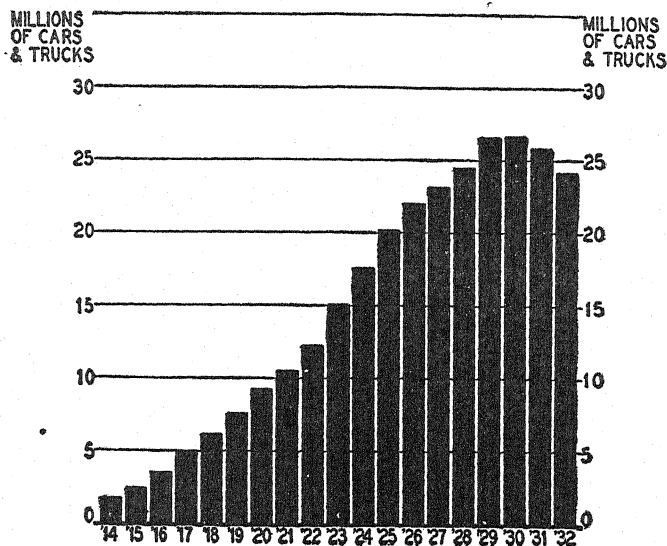
The foregoing facts indicate that if we take the whole period since the World War, our comfort class is living at a higher level than ever before. But we must constantly bear in mind that by 1933 probably only one-half of the country remained on that level.

Influence of the Rich upon the Middle Level. A typical urban family on the comfort level may be regarded as occupying an apartment of from two to ten rooms, according to the size and income of the family, or if residing in a town or suburb, as occupying a small house and garden. If the family group is like most families, it is eager that the house or apartment be as near as possible to the streets where the rich and fashionable live and that its appearance and furnishing, inside and out, resemble theirs. Such possessions of course are desired partly for their own sake and not merely to keep up appearances, although the good opinion of others is desired by most people. Ways of living on the comfort level are therefore influenced

³ *Facts and Figures of the Automobile Industry*, National Automobile Chamber of Commerce, 1932, p. 12; *Chicago Daily News Almanac and Yearbook*, 1933, p. 322.

by the desire to appear like the rich and to secure the prestige of the rich, as well as by the attractiveness of their goods and activities.

Conspicuous Consumption of Goods. Possessions go far to give social rating to the family in communities in which distinctions of



The growing number of trucks have relieved many farmers of the unpleasant work connected with caring for animals. At the same time, pleasure cars have created a new type of recreation and broadened the culture of the country dweller.

birth are few. For this reason a family on the comfort level will often sacrifice much—perhaps even mortgage its house—to have an automobile of a respected make, not only because the family enjoys riding but also because a wealthier neighbor has such a car. In large cities the desire to keep up appearances is on the whole less keen than in smaller communities, because the standards of living of social groups are less conspicuous. Private automobiles, large houses, and entertainment are not so necessary. But there is always present the desire to move into a better-located and better-furnished apartment, and to enjoy more of the city's expensive amusements—its operas, sports, and brilliant restaurants.

Urban Amusements. In towns of small size the older residents almost always tend to form social classes. Newcomers and families who have but lately risen to prosperity may be admitted to such groups rather reluctantly and for rather vague reasons, perhaps for their money, generosity in entertaining, good manners, or personal qualities. Families who have so qualified usually form sooner or later some sort of country club, which often becomes the center of social life in the community. Here occur dinners, dances, and bridge parties. Tennis courts and golf links adjoining the club or garden plots around the adjacent homes also provide opportunities for recreation.

At times the whole town may go out to cheer the baseball team, or flock to the motion-picture theater when a popular star is advertised, stopping afterwards at the corner drug store for an ice-cream soda and a bit of friendly conversation. Occasional visits of a theatrical troupe or in the summer of a traveling Chautauqua vary the round of amusements. Some organization of residents, perhaps a women's club, attempts to raise the town's intellectual level by obtaining concerts and lectures of a high order, by providing a library, or by organizing a book-study club.

WORK ON THE URBAN COMFORT LEVEL

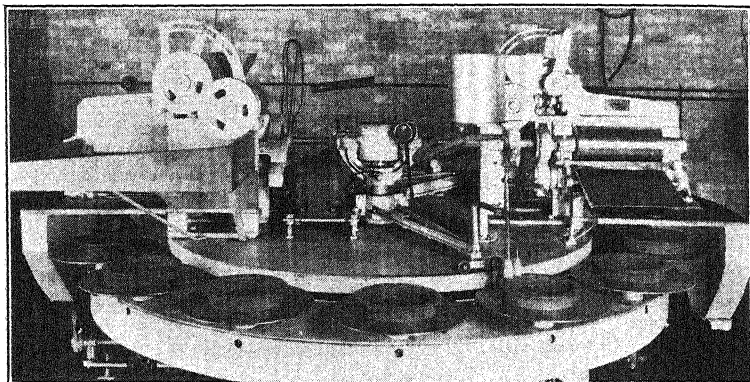
Women's Work in the Home Decreases. The activities of women on the comfort level are increasingly uncertain and changing in present-day society. The wife is often perplexed to find worthy activities. The duties which occupied her grandmother are mostly done for her. As a rule sewing is only a pastime, for the clothes of the family can be bought ready-made, of better workmanship, and at a lower price than those she can make. Sweeping and cleaning are reduced to a minimum by small apartments and labor-saving devices. Heating and lighting are attended to by janitors

Dust Mats	25	24
Dusters, Hand	24	
Dusters, Floor	24	
Dusters, Wall	24	
Earthenware Cooking Utensils	10	
Egg Beaters	8	
Electric Chafing Dishes	16	
Electric Dishwashers	5	
Electric Fans	26	
Electric Fireless Cookers	5	
Electric Griddles	18	
Electric Heaters, Room	27	
Electric Immersion Heaters	13	
Electric Irons	19	
Electric Ironing Machines	20	
Electric Mixing Device	5	
Electric Ovens	5	
Electric Oven Cookers	5	
Electric Percolators	9	
Electric Ranges	6	
Electric Refrigeration	7	8
Electric Room Heaters	27	
Electric Suction Sweepers	22	23
Electric Table Stoves	16	
Electric Toasters	17	
Electric Waftle Irons	17	18
Electric Warming Pads	28	
Electric Washing Machines	21	22
Electric Waxers	25	
Enamel Cooking Utensils	10	
Evaporators	18	

A popular housekeeping magazine sponsors this list of dependable electric household aids. (Courtesy Good Housekeeping Institute.)

or by municipal utility corporations. Even cooking is a shorter task than formerly, for many articles of food come ready for the table, or nearly so, in tins and sealed boxes. To a large extent reliance can be placed upon the neighboring restaurant, caterer, or delicatessen store for well-cooked meals at small cost.

The children are away for most of the day at school, where the training of their minds and habits is intrusted to specialists; after school they are at a public playground or at a motion-picture theater.



An automatic pie-making machine. Devices such as this have relieved women of much of the work formerly done in the home. (Courtesy Westinghouse Electric Co.)

A woman of the poorer class must continue to do many household tasks herself, but a prosperous man is more than able to spare his wife every task, not only from affection but as a mark of his own financial success. As a result the wife is left with steadily increasing leisure and too often does not have any clear ideas concerning what to do with her time.

Careers for Women. Every year greater numbers of women enter occupations formerly confined to men, and new careers are steadily opened to them not only in teaching, acting, and subordinate business positions, where they have long been active, but also in law, medicine, and executive business capacities.

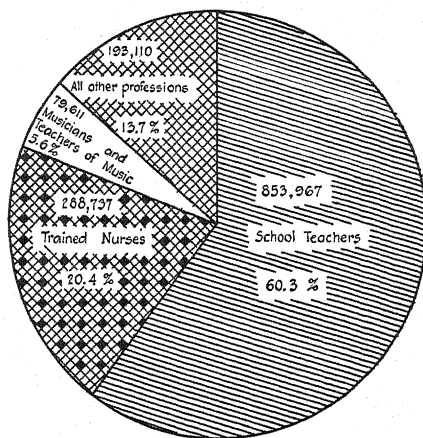
Men's Work Extremely Varied. The occupations of men on the comfort level are limitless in variety. They direct the army of manual laborers and are themselves directed by men of greater wealth or

superior industrial position. They include skilled craftsmen, small shopkeepers, professional men, scientists, artists, and writers. The occupations carried on by such workers offer wide opportunity for originality and self-development and provide an outlet for every human capacity.

Care and Worry on the Comfort Level. But it must not be supposed that the struggle to "make ends meet" comes to an end when a family rises out of the poverty class; instead, it is often intensified. Desires and ambitions frequently increase more rapidly than income. Things which formerly were luxuries seem necessities, for most people fight stubbornly to preserve a standard of living once attained. To a professional man inability to give his son a college education may be

as keen a disappointment as a day laborer would suffer if his son had to go without any schooling at all. Success or failure to a business man often depends on doing as well financially as he expected to do, on keeping up with those who were his equals in college, on being able to buy his wife the luxuries her friends enjoy. Thus the desire to keep up a standard—in goods and appearances, if not in character and intellect—impels many men to sacrifice their most precious ambitions and to enter upon careers which promise greater money-making chances. There they work with anxious intensity until their youthful dreams are forgotten, no longer satisfied with moderate wealth. And if financial reverses come they are plunged into a despair that often embitters them for life.

Nor can it be supposed that men on the comfort level are free from the haunting specter of want. Most of them do not earn enough



Distribution of 1,415,425 professional women in 1930. Although teaching still occupies the majority, the time has definitely passed when woman's work outside the home is limited to giving instruction. (Adapted from material in *Bulletin No. 107*, U. S. Women's Bureau.)

to provide for extended illness or long-enforced idleness. A severe depression strikes thousands of "white-collar workers." Accustomed to mild gentility, frequently too proud and in fact unable to do other sorts of work, they sink tragically into despair and ruin.

Uninspiring Work on the Comfort Level. Work on the comfort level does not offer the opportunities for mental development that it might offer. Even the men who devote their lives to creation in art and science are usually hampered at every turn by economic difficulties. The finest developments of civilization are often the easiest to get along without. If an artist wants to enjoy the comforts of life, he may be forced to sacrifice his highest ideals to secure the favor of a commercial enterprise or a capricious public.

In professional work and still more in industry the abilities of talented workers are apt to be slowly smothered by the way in which work is carried on. Some parts of our industrial system are still largely disorganized, and the ruthless competitive struggle which results may be disastrous to both the worker and society.

Where industry is highly organized, a new set of dangers arises. Not only does keen rivalry for advancement exist, but such industry tends to be reduced to monotonous ways of doing things. Originality is often less desired than faithful performance of a set task and endurance in sticking to a tedious job. For the clerk, accountant, department manager, hardly less than for the manual laborer, work is frequently so specialized as to be entirely lacking in variety. Such activities are important in increasing society's productive efficiency, but they are not educative to the individual. Real economic progress must therefore find ways to combat the deadening influence of industrial routine, either through controlling methods of work or through increasing opportunities for productive leisure or through both.

A Picture of Urban Comfort Level Life. Sinclair Lewis has written the epic of comfort life in urban-America. In his novel *Babbitt* he shows the possibilities in the comfort income; but he also points out with force the weaknesses of the culture which comfort incomes have sometimes developed in America. His Zenith is a typical industrial city; George F. Babbitt is one of its typical comfort level citizens. The following passages from the book picture unpleasant aspects of urban life on the comfort level:⁴

⁴ Harcourt, Brace and Company, 1922, pp. 5, 14-15, 24-25, 52-55, 117-19. Quoted by permission of the publishers.

Though the house was not large it had, like all houses on Floral Heights, an altogether royal bathroom of porcelain and glazed tile and metal sleek as silver. The towel-rack was a rod of clear glass set in nickel. The tub was long enough for a Prussian Guard, and above the set bowl was a sensational exhibit of tooth-brush holder, shaving-brush holder, soap-dish, sponge-dish, and medicine-cabinet, so glittering and so ingenious that they resembled an electrical instrument-board. . . .

The [bed] room displayed a modest and pleasant color-scheme, after one of the best standard designs of the decorator who "did the interiors" for most of the speculative-builders' houses in Zenith. The walls were gray, the wood-work white, the rug a serene blue; and very much like mahogany was the furniture—the bureau with its great clear mirror, Mrs. Babbitt's dressing-table with toilet-articles of almost solid silver, the plain twin beds, between them a small table holding a standard . . . bedside book with colored illustrations—what particular book it was cannot be ascertained, since no one had ever opened it. The mattresses were firm but not hard, triumphant modern mattresses which had cost a great deal of money; the hot-water radiator was of exactly the proper scientific surface for the cubic contents of the room. The windows were large and easily opened, with the best catches and cords, and Holland roller-shades guaranteed not to crack. It was a masterpiece among bedrooms, right out of *Cheerful Modern Houses for Medium Incomes*. . . .

The Babbitts' house was five years old. It was all as competent and glossy as this bedroom. It had the best of taste, the best of inexpensive rugs, a simple and laudable architecture, and the latest conveniences. Throughout, electricity took the place of candles and slatternly hearth-fires. Along the bedroom baseboard were three plugs for electric lamps, concealed by little brass doors. In the halls were plugs for the vacuum cleaner, and in the living-room plugs for the piano lamp, for the electric fan. The trim dining-room (with its admirable oak buffet, its leaded-glass cupboard, its creamy plaster walls, its modest scene of a salmon expiring upon a pile of oysters) had plugs which supplied the electric percolator and the electric toaster. . . .

To George F. Babbitt, as to most prosperous citizens of Zenith, his motor car was poetry and tragedy, love and heroism. The office was his pirate ship but the car his perilous excursion ashore.

Among the tremendous crises of each day none was more dramatic than starting the engine. It was slow on cold mornings; there was the long, anxious whirr of the starter; and sometimes he had to drip ether into the cocks of the cylinders, which was so very interesting that at lunch he would chronicle it drop by drop, and orally calculate how much each drop had cost him.

This morning he was darkly prepared to find something wrong, and he felt belittled when the mixture exploded sweet and strong, and the car didn't even brush the door-jamb, gouged and splintery with many bruising by

fenders, as he backed out of the garage. He was confused. He shouted "Morning!" to Sam Doppelbrau with more cordiality than he had intended.

Babbitt's green and white Dutch Colonial house was one of three in that block on Chatham Road. To the left of it was the residence of Mr. Samuel Doppelbrau, secretary of an excellent firm of bathroom-fixture jobbers. His was a comfortable house with no architectural manners whatever; a large wooden box with a squat tower, a broad porch, and glossy paint yellow as a yolk. Babbitt disapproved of Mr. and Mrs. Doppelbrau as "Bohemian." . . .

On the other side of Babbitt lived Howard Littlefield, Ph.D., in a strictly modern house. . . . Littlefield was the Great Scholar of the neighborhood; the authority on everything in the world except babies, cooking, and motors. He was a Bachelor of Arts of Blodgett College, and a Doctor of Philosophy in economics of Yale. He was the employment-manager and publicity-counsel of the Zenith Street Traction Company. He could, on ten hours' notice, appear before the board of aldermen or the state legislature and prove, absolutely, with figures all in rows and with precedents from Poland and New Zealand, that the street-car company loved the Public and yearned over its employees; that all its stock was owned by Widows and Orphans; and that whatever it desired to do would benefit property-owners by increasing rental values, and help the poor by lowering rents. . . .

A stranger suddenly dropped into the business-center of Zenith could not have told whether he was in a city of Oregon or Georgia, Ohio or Maine, Oklahoma or Manitoba. But to Babbitt every inch was individual and stirring. As always he noted that the California Building across the way was three stories lower, therefore three stories less beautiful, than his own Reeves Building. As always when he passed the Parthenon Shoe Shine Parlor, a one-story hut which beside the granite and red-brick ponderousness of the old California Building resembled a bath-house under a cliff, he commented, "Gosh, ought to get my shoes shined this afternoon. Keep forgetting it." At the Simplex Office Furniture Shop, the National Cash Register Agency, he yearned for a dictaphone, for a typewriter which would add and multiply, as a poet yearns for quartos or a physician for radium.

At the Nobby Men's Wear Shop he took his left hand off the steering-wheel to touch his scarf, and thought well of himself as one who bought expensive ties "and could pay cash for 'em, too, by golly"; and at the United Cigar Store, with its crimson and gold alertness, he reflected, "Wonder if I need some cigars—idiot—plumb forgot—going t' cut down my fool smoking." He looked at his bank, the Miners' and Drovers' National, and considered how clever and solid he was to bank with so marbled an establishment. His high moment came in the clash of traffic when he was halted at the corner beneath the lofty Second National Tower. His car was banked with four others in a line of steel restless as cavalry, while the crosstown traffic, limousines and enormous moving-vans and insistent motor-cycles, poured by; on the farther

corner, pneumatic riveters rang on the sun-plated skeleton of a new building; and out of this tornado flashed the inspiration of a familiar face, and a fellow Booster shouted, "H' are you, George!" Babbitt waved in neighborly affection, and slid on with the traffic as the policeman lifted his hand. He noted how quickly his car picked up. He felt superior and powerful, like a shuttle of polished steel darting in a vast machine.

As always he ignored the next two blocks, decayed blocks not yet reclaimed from the grime and shabbiness of the Zenith of 1885. While he was passing the five-and-ten-cent store, the Dakota Lodging House, Concordia Hall with its lodge-rooms and the offices of fortune-tellers and chiropractors, he thought of how much money he made, and he boasted a little and worried a little and did old familiar sums:

"Four hundred fifty plunks this morning from the Lyte deal. But taxes due. Let's see: I ought to pull out eight thousand net this year, and save fifteen hundred of that—no, not if I put up garage and— Let's see: six hundred and forty clear last month, and twelve times six-forty makes—makes—let's see: six times twelve is seventy-two hundred and—Oh rats, anyway, I'll make eight thousand—gee, now, that's not so bad; mighty few fellows pulling down eight thousand dollars a year—eight thousand good hard iron dollars—bet there isn't more than five per cent. of the people in the whole United States that make more than Uncle George does, by golly! Right up at the top of the heap! But— Way expenses are— Family wasting gasoline, and always dressed like millionaires, and sending that eighty a month to Mother— And all these stenographers and salesmen gouging me for every cent they can get—" . . .

The Zenith Athletic Club is not athletic and it isn't exactly a club, but it is Zenith in perfection. It has an active and smoke-misted billiard room, it is represented by baseball and football teams, and in the pool and the gymnasium a tenth of the members sporadically try to reduce. But most of its three thousand members use it as a café in which to lunch, play cards, tell stories, meet customers, and entertain out-of-town uncles at dinner. It is the largest club in the city, and its chief hatred is the conservative Union Club, which all sound members of the Athletic call "a rotten, snobbish, dull, expensive old hole—not one Good Mixer in the place—you couldn't hire me to join." Statistics show that no member of the Athletic has ever refused election to the Union, and of those who are elected, sixty-seven per cent. resign from the Athletic and are thereafter heard to say, in the drowsy sanctity of the Union lounge, "The Athletic would be a pretty good hotel, if it were more exclusive."

The Athletic Club building is nine stories high, yellow brick with glassy roof-garden above and portico of huge limestone columns below. The lobby, with its thick pillars of porous Caen stone, its pointed vaulting, and a brown glazed-tile floor like well-baked bread-crust, is a combination of cathedral crypt and rathskeller. The members rush into the lobby as though they were

shopping and hadn't much time for it. Thus did Babbitt enter, and to the group standing by the cigar-counter he whooped, "How's the boys? How's the boys? Well, well, fine day!" . . .

Chum Frink had recently been on a lecture-tour among the small towns, and he chuckled, "Awful good to get back to civilization! I certainly been seeing some hick towns! I mean—Course the folks there are the best on earth, but, gee whiz, those Main Street burgs are slow, and you fellows can't hardly appreciate what it means to be here with a bunch of live ones!"

"You bet!" exulted Orville Jones. "They're the best folks on earth, those small-town folks, but, oh, mama! what conversation! Why, say, they can't talk about anything but the weather and the ne-oo Ford, by heckalorum!"

"That's right. They all talk about just the same things," said Eddie Swanson.

"Don't they, though! They just say the same things over and over," said Vergil Gunch.

"Yes, it's really remarkable. They seem to lack all power of looking at things impersonally. They simply go over and over the same talk about Fords and the weather and so on," said Howard Littlefield.

"Still, at that, you can't blame 'em. They haven't got any intellectual stimulus such as you get up here in the city," said Chum Frink.

"Gosh, that's right," said Babbitt. "I don't want you highbrows to get stuck on yourselves but I must say it keeps a fellow right up on his toes to set in with a poet and with Howard, the guy that put the con in economics! But these small-town boobs, with nobody but each other to talk to, no wonder they get so sloppy and uncultured in their speech, and so balled-up in their thinking!" . . .

"Sure, and the inspiration we get from rubbing up against high-class hustlers every day and getting jam full of ginger," said Eddie Swanson.

"Same time," said Babbitt, "no sense excusing these rube burgs too easy. Fellow's own fault if he doesn't show the initiative to up and beat it to the city, like we done—did. And, just speaking in confidence among friends, they're jealous as the devil of a city man. Every time I go up to Catawba I have to go around apologizing to the fellows I was brought up with because I've more or less succeeded and they haven't. And if you talk natural to 'em, way we do here, and show finesse and what you might call a broad point of view, why, they think you're putting on side. There's my own half-brother Martin—runs the little ole general store my Dad used to keep. Say, I'll bet he don't know there is such a thing as a Tux—as a dinner-jacket. If he was to come in here now, he'd think we were a bunch of—of— Why, gosh, I swear he wouldn't know what to think! Yes, sir, they're jealous!"

Chum Frink agreed, "That's so. But what I mind is their lack of culture and appreciation of the Beautiful—if you'll excuse me for being highbrow. Now, I like to give a high-class lecture, and read some of my best poetry—not

the newspaper stuff but the magazine things. But say, when I get out in the tall grass, there's nothing will take but a lot of cheesy old stories and slang and junk that if any of us were to indulge in it here, he'd get the gate so fast it would make his head swim."

Vergil Gunch summed it up: "Fact is, we're mighty lucky to be living among a bunch of city-folks, that recognize artistic things and business-punch equally. We'd feel pretty glum if we got stuck in some Main Street burg and tried to wise up the old codgers to the kind of life we're used to here. But, by golly, there's this you got to say for 'em: Every small American town is trying to get population and modern ideals. And darn if a lot of 'em don't put it across! Somebody starts panning a rube crossroads, telling how he was there in 1900 and it consisted of one muddy street, count 'em, one, and nine hundred human clams. Well, you go back there in 1920, and you find pavements and a swell little hotel and a first-class ladies' ready-to-wear shop—real perfection, in fact! You don't want to just look at what these small towns are, you want to look at what they're aiming to become, and they all got an ambition that in the long run is going to make 'em the finest spots on earth—they all want to be just like Zenith!"

THE ECONOMIST'S PROBLEM ON THE COMFORT LEVEL

Material Goods and Human Welfare. Certain basic material wants must be satisfied before happiness is possible for civilized men. Since the poverty level does not satisfy these wants, the problem of raising *more* people into the comfort level is a task of increasing the production of, and distributing more equitably, material goods. On the comfort level there is still the problem of securing the maintenance of standards and also of raising standards, for many people in the lower ranges of comfort do not live really well. The surge of industry seems inevitably to mechanize work on the comfort level, but greater wealth would mean more leisure to devote to other things.

In so far as unhappiness on the comfort level is due to inability to "keep up with the Joneses," there are two remedies: either to get more wealth, or to be satisfied with less and use what one has more effectively. The second, which is perhaps the wiser, requires a correct estimate of the values of life. Hardly anyone can supply that, except for himself. But the first also requires much to be done. For these reasons, this book will inquire into the ways of increasing the material means for happiness and those of making these means available to all.

SUMMARY

Comfort is the middle level of living between poverty and riches. It offers the basic necessities of life and moderate luxuries and leisure. A family on the comfort level is free from the prime economic barriers to happiness. In 1918 about one-half of the people in the United States lived comfortably, in 1929 about two-thirds, and in 1933 about one-half.

Rural comfort provides varied foods, well-fitted homes, social life, and opportunities for cultural advancement. Most important, farm work itself offers healthy outdoor activity and calls for mental as well as physical labor. Urban comfort also offers pleasant living-conditions, but work is not free from care and worry about keeping up in the competitive struggle, and there is a tendency for productive effort to become uninspiring and mechanized. The threat of poverty is often present.

The task of those seeking to improve American economic life is to devise measures whereby families in poverty may come to know comfort and those in comfort may gain freedom from fear, a wider measure of self-development, and even higher standards of living.

QUESTIONS AND PROBLEMS

1. Is comfort harder or easier to define than poverty? Why?
2. Does the number of people on the comfort level increase proportionally to the elimination of poverty? How many families are on the comfort level now?
3. To what extent are income-tax reports an adequate measure of comfort?
4. Point out the main differences between the rural dwelling-places of our day and those of fifty or sixty years ago. State the chief advantage of each type of home.
5. How has transportation affected the character of the food used on the farm? Explain the relation of a varied diet to health.
6. Compare work on the farm and in the factory (a) for men and (b) for women. Is work more varied in the country or in the city? Mention reasons why many rural young people leave the country and go to the city.
7. Contrast the rural home of today and that of fifty years ago as to facilities for amusement.
8. Explain the main differences between the educational opportunities now

provided in the more progressive rural neighborhoods and those furnished at the time of your great-grandparents.

9. Name classes of workers generally found on the comfort level in cities. Why is the kind of work done by such persons usually paid better than the sort of work done by persons on the lower levels of living?
10. Tell how the diet of families on the comfort level has changed in recent years. Compare the present diet of people on the comfort level with that commonly found among families on the poverty level.
11. Explain the chief change that has occurred in recent years in the use of manufactured goods in homes on the comfort level. Illustrate by examples from your own home or from the homes of your relatives or neighbors.
12. How do the rich influence the expenditures of families on the comfort level? Is the effect beneficial or harmful? Give reasons.
13. Describe the amusements of the comfort group. How do they differ from the amusements of the poverty group?
14. In what way does the everyday life of a woman on the comfort level present a problem not faced by a woman on the poverty level?
15. Name occupations ordinarily carried on by people on the comfort level. How may the struggle to "make ends meet" be even more consciously felt in the comfort group than in the poverty group?
16. Tell how the occupations of workers on the comfort level frequently handicap or prevent mental development. Suggest ways by which such results may be overcome or avoided.
17. Point out passages in this chapter illustrated by the selection from *Babbitt*. What remarks in the conversation at the Athletic Club show that the group of men gathered there had much the same outlook and attitudes that they criticized?
18. Mention attractive aspects of life in a group like Babbitt's that Sinclair Lewis failed to mention. Give examples you have observed in some "Zenith" in which you have lived or visited.
19. What problems face the economist in regard to the comfort level?

READINGS IN THE CLASS LIBRARY

1. "How Mankind is Fed," Wells, *The Work, Wealth and Happiness of Mankind*, Vol. I, pp. 179-89.
2. "Making Work," Frederic Bastiat, Hill, *Readings in Vocational Life*, pp. 55-56.
3. "A Thousand Dollars," Elsie Singmaster, *ibid.*, pp. 74-82.
4. "Why I Practice the Savings-Bank Habit," M. L. Ueberle, *ibid.*, pp. 82-87.
5. "Ways of Getting a Living," T. N. Carver, *ibid.*, pp. 276-82.

6. "The Flood of Goods," Chase, *Men and Machines*, pp. 218-39.
7. "Advance in the Standard of Living," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 827-29.
8. "How Much is Enough," L. B. More, *ibid.*, pp. 829-30.
9. "The Needs of a Self-Supporting Woman," *ibid.*, pp. 831-32.
10. "Condition of American Workers, 1902," *ibid.*, pp. 846-51.

Chapter 7

LIVING IN RICHES

RICHES IN THE UNITED STATES

The Favored Few. There is of course no way to decide just where comfort passes over into riches, and accordingly no way to tell just how many rich people there are in the United States. If we choose \$10,000 a year as the minimum income for this standard, the income-tax returns tell approximately how many people come up to or surpass it. Individual earnings as reflected in tax statistics are a better measure of the number of rich families than they are of the number of poor families. For in poor families several members may earn approximately equal salaries, while in a family where one member has a very large income it is unlikely that the other members earn enough to make the family earnings very different from the earning of its most productive member. Furthermore, when we look at the earnings of the rich, it is not so important to distinguish individual from family earnings. For even if we assumed that *every* large income in the tax returns represented a *different* family, the number of rich families would still be very small. The tax statistics for 1929 are given in table 19.

The figures in this table show that less than 10 per cent of taxable incomes were \$10,000 or over in 1929. Since the total number of incomes in the country was about nine times as great as the number of taxable incomes, and as practically all incomes over \$10,000 are taxable, only about 1 per cent of the total incomes in the country amounted to \$10,000 or over. Yet this 1 per cent earned almost 50 per cent of the taxable income and almost 14 per cent of the total national income. In similar manner Table 19 indicates that the

persons earning \$50,000 or over represented only about .1 per cent of the total income-earners in the country and yet received over 6 per cent of the total national income. Finally, the table indicates that about 10 per cent of the persons earning incomes in the United States receive well over 25 per cent of the total national income.

TABLE 19

PERCENTAGES OF INCOME TAX RETURNS AND TAXABLE INCOME IN VARIOUS INCOME GROUPS IN 1929 ¹

Net-Income Class (000 Omitted)	Number of Returns	Simple Distribution Percentages		Cumulative Distribution Percentages (over Class below)	
		Of Returns in Each In- come Group	Of Taxable Income in Each In- come Group	Of Returns in Each In- come Group	Of Taxable Income in Each In- come Group
\$ 1-10	3,670,295	90.76	50.76		
10-25	271,454	6.71	16.23	9.24	49.24
25-50	63,689	1.57	8.77	2.53	33.01
50-100	24,073	.60	6.64	.96	24.24
100-150	6,376	.16	3.11	.36	17.60
150-300	5,310	.13	4.38	.20	14.49
300-500	1,641	.04	2.53	.07	10.11
500-1,000	976	.02	2.70	.03	7.58
1,000 and over	513	.01	4.88	.01	4.88
Total	4,044,327	100.00	100.00		

Thus it is clear that the percentage of even moderately wealthy people in the United States is small, that these wealthy people receive a great share of the national income, and that about 40,000 families enjoy huge incomes starting with \$50,000 and running up into the millions.

Sources of Large Incomes. Few men of great wealth receive their incomes entirely from one source. They find it a safer policy not to keep all their eggs in one basket. Accordingly a person with large funds to invest usually places them in several different enterprises. His investments, unless he wishes to exert an influence on some one concern, are generally scattered among various companies, probably

¹ Adapted from United States Bureau of Internal Revenue, *Statistics of Income for 1929*, p. 5.

in noncompeting fields—some in a copper mine or electric light company; some in the bonds of a financial or manufacturing concern; some in government securities.

In addition to stocks and bonds on which he receives dividends and interest (part of which represents the profits of the various concerns), a person of large income may have an interest-bearing account in a bank as well as a checking account. He may also receive interest from mortgages on land and houses, and rent from tenants on real estate which he owns outright. Finally, he may receive fees as director in one or more companies and a regular salary as an officer in one of them. In the largest incomes a relatively small proportion is derived from business, wages, or salaries, and a large proportion from property.

RICH MEN AT WORK

Industrial Magnates and Their Service. In America today, and more and more in Europe with the decline of the aristocracy, few men of energy and force of character are content to spend their time in idleness. The great majority of wealthy men take some part in managing the sources of their income and in trying to increase it. Their part in production is often very valuable to society, although it may seem selfish in aim. Of the great American fortunes many, it is true, were secured by underhand methods, tricky deals, and frauds upon the public. But many other fortunes have come as the result of pioneer work in developing industry. They are the rewards paid by society in profits and salaries to captains of industry for their executive skill, hard work, and resourcefulness. Many able men have failed in the struggle against shrewd competitors; others have extorted a reward beyond what they deserved. It is hard, therefore, to determine the extent to which wealthy men have earned their wealth by service to society. But we can say that most of them, whether their activities are good or bad, are not idlers.

Other Wealthy Groups. Besides the industrial magnates there are other groups of men whose earnings place them above the comfort class. Popular motion-picture actors—men, women, and children—often receive very large salaries. A few professional men are richly paid for their services. Somewhat smaller rewards, but still generous in size, go to artists who engage in commercial advertising,

Doherty or 123 Directorates, Leading City, New List Shows

Henry L. Doherty is still champion director in New York, being on the boards of 123 companies, according to the new issue of "Directory of Directors in the City of New York." Patrick E. Crowley, who recently, resigned as president of the New York Central, is second, holding eighty-four directorates. The records of twenty-four men, with comparisons with their positions in previous years, follow:

	1931	1927	1923	1917
Doherty, Henry L.....	123	108	106	67
Crowley, Patrick E.....	84	86	..	..
Hoyt, Richard F.....	81	38	16	..
Brush, Matthew C.....	62	45	36	..
Lore, Leonor F.....	52	55	59	42
Rockefeller, Percy A.....	52	45	39	11
Wiggin, Albert H.....	47	42	39	30
Sloan, Matthew S.....	42	19	9	..
Vanderbilt, Harold S.....	40	43	44	35
Mitchell, Sidney Z.....	37	38	36	26
Johnston, Percy H.....	31	11	8	..
Vanderbilt, William K.....	28	29	34	64
Lehman, Arthur.....	25	17	10	6
Carlton, Newcomb.....	23	24	23	13
Davison, George W.....	22	28	23	20
Day, Joseph P.....	21	18	12	8
Warburg, Paul M.....	17	11	9	..
Vanderbilt, William H.....	17	4	..	..
Morgan, J. Pierpont.....	15	11	10	8
Lamont, Thomas W.....	14	12	11	13
Goelet, Robert Walton.....	13	10	9	8
Gibson, Harvey D.....	9	10	11	12
Rockefeller Jr., John D.....	8	9	7	9
Whitney, Cornelius V.....	8	2	..	..

The directory, for the first time, lists the members of important partnerships, including firms on the Stock, Curb and Cotton Exchanges.

CHAIN ST. ALES.

Many men who have more money than their families can use, and who know lawyers and trust companies competent to manage fortunes, continue nevertheless to take a very active part in the direction of large enterprise. When these enterprises are useful to society, the same is true of the men who guide them well. (From *The N. Y. Times*, November 24, 1931.)

to the authors of best-selling novels, and to the editors of successful periodicals. Now and then a scientist who invents a useful and salable article or device has won wealth. Usually, however, it is ownership of property rather than occupation that leads to riches.

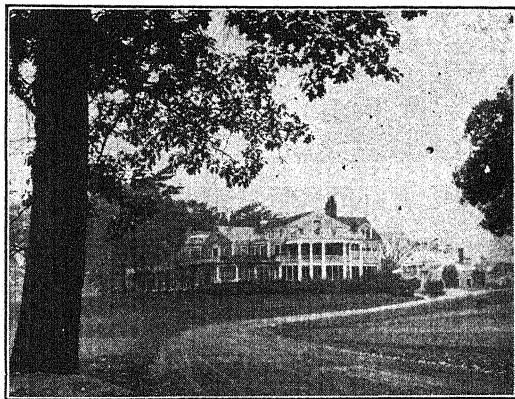
Self-Made Men. The typical self-made man is hard-working and thrifty. Unaccustomed in youth to leisure and the enjoyment of luxuries, he has no time for them while the struggle is on and when it is over he often finds he is too old to change his habits. He is bored by idle amusements and often turns back to his office after trying a year or two of golf and travel. Or if the quest for money has grown distasteful, he may turn his energy to philanthropy and patronage of good enterprises: to the founding of research institutions, libraries, scholarships, or the endowing of orchestras, hospitals, and universi-

ties, often expecting in return a voice in their policy and management. He may turn to politics and run for office or more likely become a power behind the throne as a contributor to party campaign funds and a member of nominating committees.

RICH MEN AT PLAY

Rich Men's Sons. It is to be expected that the inheritor rather than the creator of a large fortune should slacken in energy and fail to build as high above the starting-point as his father did. This used to cause people to say that it took three generations to go from shirt-sleeves to shirtsleeves, meaning that the son would squander all that the father made. This statement is an exaggeration if applied to large fortunes, and anyone who has read the amusing story of *Brewster's Millions* knows that it is difficult to squander a million dollars.

The truth is that a rich son does not have to work if he does not like work. A solicitor or trust company will manage his estate entirely, collecting rents, ordering repairs on buildings, paying taxes, securing and evicting tenants, caring for all details. With such



The country club rings with talk of fashion and sport. Do its frequenters often gather to discuss the social problems of our times? (© Ewing Galloway.)

arrangements the rich man merely draws checks upon the bank account which is kept miraculously full for him. He may have little idea how his property was acquired or how his income accumulates. Such sons are free to spend their time at Palm Beach or lounging about a club with others of their kind. They have been brought up in fashionable preparatory schools and colleges, with an interest in motorcars and dancing and the assurance of an easy future whether

they work or not. After college they enter the offices of their fathers or one of their fathers' friends to learn how business is run, and turn without fatigue at the day's end to dinner, theater, and dancing at city or suburban homes or in the city's amusement district. In time they inherit their fathers' interests and, if they choose to do so, intrust them to capable subordinates, coming down to the offices for an hour or two in the morning to see that all is running well.

WOMEN ON THE LEVEL OF RICHES

The Life of Fashion. The wife of a rich man whose father was self-made is also very different from his mother. The older woman, perhaps, had little education. She worked beside her husband through

Annual Bachelors' Ball Takes Place
At the Country Club in Elizabeth
Several of N Before Entertain at Homes
Southampton's Charity Derby Junior League
Colony Planning Artists Services Give Club Ready
Active Summer Debates Show Tuesday
Opera Tomorrow To Be in Concert
Heads Tomorrow Babies' Ward
Charity Society's Abbey
Parade to Is Feature of Week's Players
Youths' Design At Southern Pines Group
Tuesday Will
Event Aids the Unemployed
J. D. Wings, of New York,
Visit the L. B. Smith

The mind of the popular "deb," or at least of her competent secretary, is filled with a variety of diversions such as these. (Clippings from *The N. Y. Herald Tribune*, 1933.)

years of housework, saving pennies, and with difficulty acquired social graces late in life. The younger generation, a little ashamed of its humble origin, tries to cover it up by assuming the manner of people long accustomed to wealth. The wife no longer needs to perform or even supervise home tasks, for the management of home and children is turned over to housekeepers, butlers, governesses, and private schools. Fashionable acquaintances are numerous and much care must be exercised to invite the

right people to dinners and parties. She is aided by a capable secretary, a young woman of good breeding but little money, who keeps track of invitations given and received, of obligations which must be repaid, and of the arrangements for making dinner and bridge parties faultlessly correct and elegant. The secretary also sorts out from the begging letters those which might arouse her mistress's

sympathy and attends to the sending of regular checks to an approved list of charities.

Cares of the Rich. The wife, if active by nature and serious in her ideals, will have a special interest or hobby—a milk station, day nursery, or settlement house among the poor, a foreign mission, or a fund for aiding famine sufferers. To this she will give not only money but also time and thought, deriving from such work the happiness which goes with continued effort for a worth-while cause. Even a more frivolous woman as she advances toward middle age usually turns her interest more and more from amusement to work which gives her self-respect. This may be simply the problem of seeing that her children, if she has any, act and think in accordance with the best conventions. Above all they must marry well and if possible with some one of greater wealth and more respected ancestry than their own. The mother may aspire to a European title for her daughter; the son must at any cost be kept from being entrapped by a designing adventuress.

High-Scale Living. For the rich the summer and winter seasons follow each other, city house and country house, a few weeks in the autumn for opera and other city activities, a January trip to Florida or a few weeks in spring and summer at the beach or in the mountains.

NEW YORK WORLD-TELEGRAM, FRIDAY, NOVEMBER 4, 1932.

Cost of Launching a Debutante Dives with the Price of Carrots; a Good Debut Was \$11,500; Now You Can Pick One Up for \$5,000.

Of Course You Have to Furnish the Maiden and Her Ward—

robe—But Then the Price of Silk and Satin

Has Tumbled, Too.

By MARGUERITE YOUNG,

World-Telegram Staff Writer.

Papa is paying less, much less, to be the marriage mart by the genteel way

year. The median cost is around

to some, perhaps, but patently en-

pre-depression price of \$11,500.

It can be done for not

The mean was fig-

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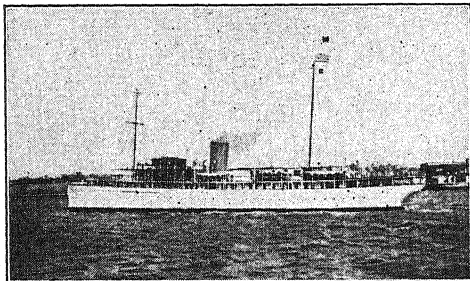
schew

to

The money spent for a debut is an investment. The girl whose parents display their wealth may be attractive to the scion of equal wealth who wants to unite two fortunes, and even more attractive to the European who wants to grace an American fortune with his own nobility of birth. (From *The World Telegram*, November 4, 1932.)

Here a palatial summer home is waiting, or a model farm if the husband was a country boy, or perhaps a copy of an Italian villa, medieval castle, or French château. In any case the residence is within motoring distance of the country club with its round of golf, bridge,

dancing, and gossip. The following article by Stuart Chase² presents a vivid picture of the manner in which some of the wealthier people in the United States spend their time and money.



A yacht like this may cost \$100,000 per year to maintain—enough to support forty families in comfort. Its owner may use it for only a few weeks during the year. (Wide World Photos.)

Park Avenue

Park Avenue on the island of Manhattan is the end of the American ladder of success. Higher one cannot go. Here comes to anchor at last fortune after fortune, until now the street lays acknowledged claim to the most stupendous aggregation of multimillionaires

which the world has ever seen. The spoil of a continent, aye, of the seven seas, is massed along this harsh stone canyon—the winnings from oil, steel, railroads, mining, lumber, motor cars, banking, real estate, moving pictures, foreign trade, speculating, the manufacturing of widgets, the marketing of tooth paste, the distribution of the assets of button kings. The art treasures of Europe and the East—paintings, frescoes, paneling, tapestries, jewels, period furniture—have been imported by the shipload, to make these dollars manifest. The Avenue spends \$280,000,000 a year, according to a recent and conservative estimate, and the income of its average family probably exceeds \$100,000. The ratios are swollen, furthermore, by the number of Chicago, Pittsburgh, Cleveland and Detroit princes of finance who maintain apartments on the Avenue, even though they may use them only a few weeks in the year. The connection is a desirable one. Indeed, from every point of view, this street with its park, its flora and fauna, merits our respectful and thoughtful attention. There are no more worlds to conquer. If America has a heaven, this is it. . . .

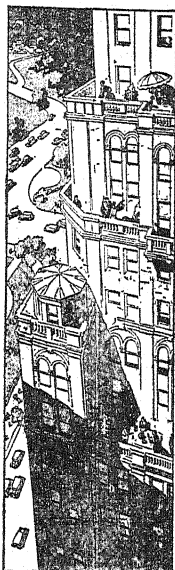
The width of the Avenue permits of more air and sunlight than perhaps any other New York thoroughfare below Fifty-ninth—Broadway, of course, is a mountain trail compared to it—but of that unique width nothing, or almost nothing, has been made which gives the tired eye rest. The wealth and fashion of the nation lives, in perspective at least, in structures almost as gaunt as factories. Coming nearer, the differences in detail begin to register forcibly. Rolls-Royces parked along the curbsings. Glimpses through carved

² *New Republic*, Vol. XLI, pp. 9-11 (May 25, 1927). Quoted by permission of the publishers.

doorways, past marvelously upholstered commissars, into entrance halls of marble, gold and velour. Now and then a glimpse into an interior court, with pointed fir trees fighting for a sunless, carbonated life. Governesses with exotic children; governesses with even more exotic dogs. On some of the monolith, set-backs, above the fifteenth floor or so; set-backs promising sumptuous apartments with light from east and west, and the possibility of garden terraces. . . .

Within the limits of standardized steel and veneer masonry construction, the apartments do what they can. One hears of a single bathroom in jade and gold costing \$35,000. One hears of "duplex roof" apartments, which are really separate houses perched on the tops of the monoliths, with light on four sides, renting as high as \$40,000 a year. Mr. Adolph Zukor leases nine rooms at \$4,000 per room. Twenty thousand dollars a year for space below the roof is a common figure. For the most exclusive section of the Avenue, the average rental is in the neighborhood of \$1,500 per room per year. The "coöperative" apartment house, so-called, is here the order of the day. In a coöperative, one buys one's apartments outright. The residents then own the building, roof and walls complete, while the speculative builder, not, it is said, without a smile, steps out of the picture altogether. It costs about \$7,500 a room to buy into a coöperative—say, \$75,000 for a family home. This is obviously less costly than paying the current rentals, but one bears the not inconsiderable risks of the future of New York real estate. After all, there is a limit to the number of sardines which can be packed in a can.

Even at these princely figures, the Park Avenue resident only spends from 5 to 10 per cent of his income for rent or its equivalent, in contrast with the 25 to 35 per cent paid by the wage-earner. But a man who needs, ac-



The twenty-third floor of The Sherry-Netherland is a single apartment . . . A terrace-promenade practically surrounds it, 175 feet long—the owner's "private estate." On the north, the terrace widens to 40 feet. Dining-room and living-room open onto this section, with great French windows . . . Some spring night, the owner of this apartment will give a terrace party. 100 guests will dine and dance on the promenade. Central Park, the Hudson, Long Island, will be a twinkling fairland at their feet. The dinner will be prepared in the Sherry kitchens below, and served in Sherry style. Next morning, the owner can dash light-heartedly to Europe. Domestic expense ceases. Sherry carries on the burden of his household. Butlers, valets, maids—all will be ready to function again when he returns . . . The Sherry-Netherland is a tower of residence apartments with Sherry service. It is more than a place to live; it is a way of living. October occupancy.

The SHERRY-NETHERLAND

FIFTH AVENUE • AT FIFTY-NINTH STREET
OPERATED BY THE SHERRY-NETHERLAND CORPORATION
WILLIAM C. WARREN • RENTING MANAGER • RESIDENT 7220

(Courtesy The Sherry-Netherland Hotel.)

ording to current market quotations, \$25,000 to finance a debutante daughter through one season, must save somewhere.

The most luxurious apartment on the Avenue is held by a bachelor. It is on the roof, and contains a ballroom eighty by forty feet, and a living room two-thirds as spacious. For its lordly floors, rare rugs have been especially woven, while all dressing cabinets have been built into the walls of the bedrooms, so that, when the drawers are closed, the wall design is innocent of all hint of the toilet. . . .

By and large, the important factor is not the outlay for rent, but for furnishings. One simply is not settled, if the decorations do not reach \$100,000—the operation being frequently on the principle of giving the interior decorator *carte blanche*. . . . Imported fireplaces are strictly in order, as are beamed and frescoed ceilings. Meanwhile, in order that the master may not grow irritable waiting for his half grapefruit, electric clocks are sunk into kitchen walls, and regulated from the central office. Of servants' bedrooms, the average size is six by eight feet.

For those unduly irritated by the servant problem—in this heaven it is no more settled than upon earth; and for papa and mamma—or popper and mommer—after the children have married and departed, there is the apartment hotel, of which the Ritz Tower is the outstanding exhibit this year. In these, instead of maintaining ten or twelve rooms with a corps of one's own servants, one may live with equal luxury in three or four rooms, the house providing all services, including those of maid and butler, with meals served in one's rooms or in the exquisite restaurant below. For this snug home life one pays in the neighborhood of \$3,000 per room per year in rental alone.

There are in the United States today more than 15,000 millionaires. Two hundred and seven individuals paid taxes on an income of a million dollars or more in 1926—the greatest number on record. Even the fabulous earnings during the War did not produce such a crop of million-dollar incomes. At the head of the list stands Mr. Henry Ford, with a private fortune of some \$300,000,000, and sole ownership of the Ford Motor Company, for which Mr. J. W. Prentiss has on three separate occasions tendered one billion dollars. Thus Mr. Ford's total resources are in the neighborhood of \$1,300,000,000 (in which both his son Edsel and Mrs. Ford share). The second greatest fortune is undoubtedly that of Mr. John D. Rockefeller, Jr., and the third, probably, that of Mr. Andrew W. Mellon, the Secretary of the Treasury. There are at least a score of individuals worth one hundred millions or more. There are more multimillionaires in the United States than in all the rest of the world combined, even if we include the quasi-governmental wealth of the princes of India and the East. Columbus revealed a continent which was destined to be richer by milliards than that he sought. Richer in money, if not in craftsmanship and beauty.

RICHES AS AN AIM OF ECONOMIC PROGRESS 131

Of our 15,000 millionaires, nearly 4,000 live in Greater New York, an unparalleled concentration, and it is safe to estimate that the overwhelming majority live on Park Avenue or its immediate vicinity. We note apartment houses with sixty millionaires under a single roof! Along the whole stretch of the Avenue, perhaps 3,000 are on exhibition, while another thousand have the spending of the income on a million—\$50,000 and upwards a year. And spend it. . . .

Between Thirty-fourth and Ninety-sixth Street—a distance of about three miles—there live some 16,000 persons—roughly, 4,000 families. For the year 1927, the [Park Avenue] Association expects them to spend the staggering total of \$280,000,000, or \$70,000 per family. The average income, after allowing for savings and reinvestments, is probably in excess of \$100,000. Well may the Association say that "Park Avenue leads the world in concentrated buying power." Nothing like it has ever been seen on earth before. . . .

In the aggregate, 4,000 women and their daughters will spend \$85,000,000 for clothes of all kinds—about \$21,000 per family, including one mother and one daughter. Fathers and sons will spend about \$18,000,000 for clothes—a little more than one-fifth of the outgo for the women—say, \$4,500 to tailors and shirt-makers, per family. What it costs to maintain a wife who keeps up with the procession could scarcely be better demonstrated. Let the young man of fashion budget his own outlay for clothes, multiply it by five, and see if he is prepared to meet the Park Avenue standard!

The total outlay for rent and furnishings, including pictures and antiques, is over \$58,000,000, about \$15,000 per family. For food and restaurants, the Avenue will spend \$32,000,000, or \$8,000 per family. For jewelry, it will spend \$20,000,000, \$5,000 per family. For motor cars and garaging, \$16,000,000, \$4,000 per family. For travel, \$15,000,000; for beautifying and perfumes, \$8,000,000; for yachts, \$7,000,000; for theaters and cabarets, \$5,000,000 (an absurdly low estimate, says the Park Avenue Association); for flowers, candy and gift things, \$10,000,000.

And for charity, which covereth all, \$5,000,000.

RICHES AS AN AIM OF ECONOMIC PROGRESS

In America, at least, the part played by people born to riches in the country's creative thought, its music, painting, literature, and science, has been small. Their greatest contribution so far has been the financing of the enterprises of others. Their interest is often sincerely philanthropic, but sometimes is manifested at no great sacrifice in order to increase the social esteem in which they are held. One

may even question whether American wealth is often used to develop the art of living.

Such observations have led many philosophers to believe that moderate wealth is better than riches; that the spur of want is within limits a valuable aid to the development of character and intelligence; that few people can withstand the influence of luxury. If such beliefs are true, then comfort may be a better standard of living than riches. Unquestionably the millions of poor would be benefited by rising above misery to a point where physical health could begin and native talents have a chance to develop. It is also unquestionable that people can and do use riches well, promoting the growth and enjoyment of themselves and others. As time goes on, more people may discover what constitutes wise expenditure and learn how to acquire the art of living.

SUMMARY

Although there is no absolute standard of riches, we may select a yearly income of \$10,000 as the minimum for this standard. Statistics of income show that only about 1 per cent of the total incomes in the country in 1929 were \$10,000 per year or more. This 1 per cent, however, gathered in 14 per cent of the total national income. The percentage of even moderately wealthy people is small, and only a few families have incomes running into the millions. These few own a considerable portion of the nation's wealth.

The builders of fortunes may do society a great deal of good or much harm. Many rich men are hard workers and grow restive in retirement. On the other hand, the sons and wives of the wealthy, who have not been trained to work, frequently lead frivolous lives devoid of meaning. Although wealth may at times be misused, it may be put to good purposes. It offers *opportunities* which poorer people cannot create. Consequently we shall consider ways of producing more wealth and of giving a greater number of people a chance to use it.

QUESTIONS AND PROBLEMS

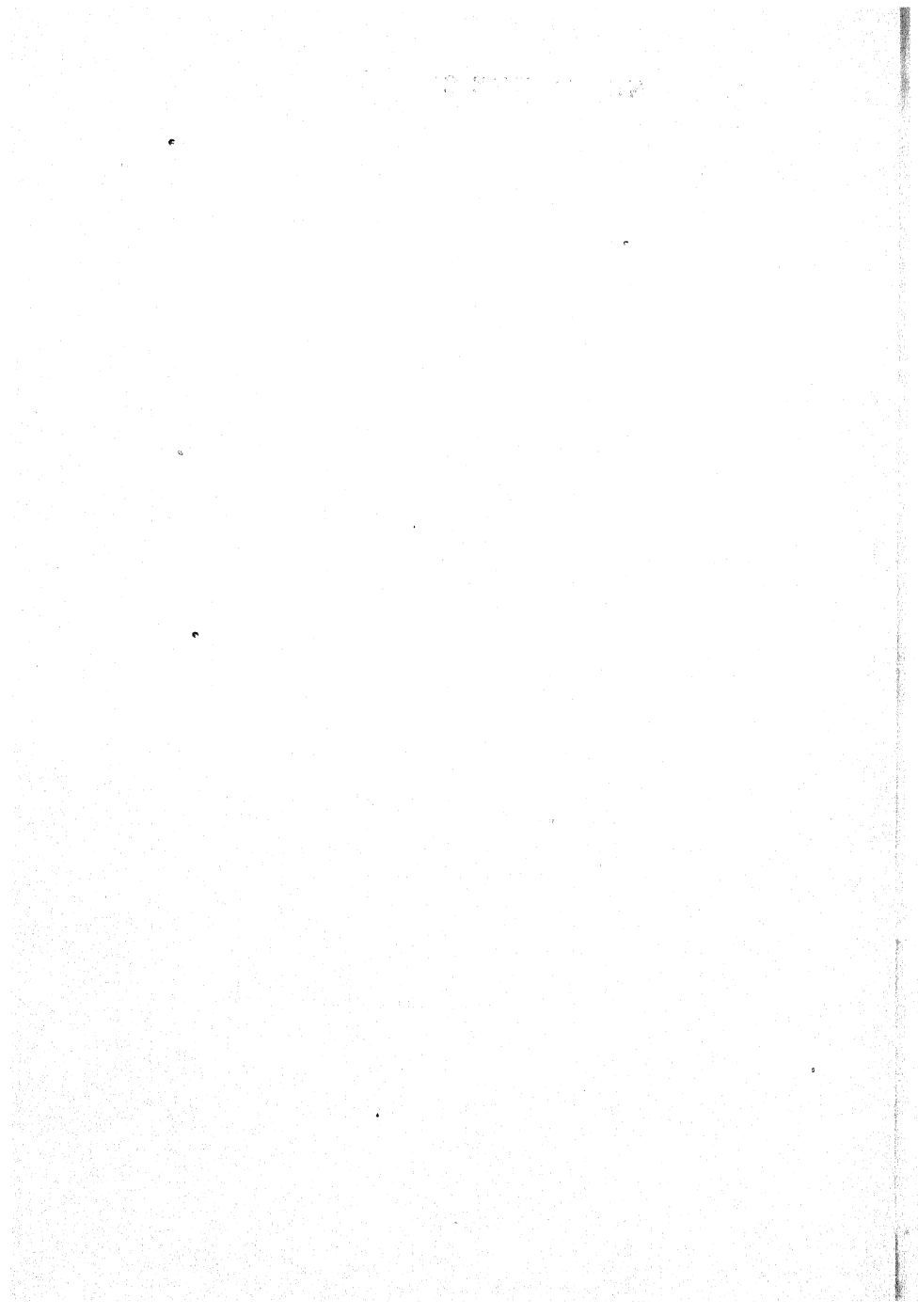
1. Who are "the rich"? How can one tell? Estimate the number of "the rich" in your community. Does the proportion of the American people

that are "rich" seem to be growing larger or smaller? On what evidence do you base your opinion?

2. Classify the sources from which people of large incomes usually receive their funds. Which is the most important source?
3. What do rich men do with their time? Be prepared to illustrate your answer by describing the activities of one or more of the following men: Henry Ford, John D. Rockefeller, Jr., Harvey Firestone, Andrew Mellon, J. P. Morgan, Douglas Fairbanks, Charles Chaplin, Vincent Astor, W. H. Vanderbilt, C. V. Whitney. Consult the *Reader's Guide to Periodical Literature*.
4. How do rich men spend their money? Cite examples from the list of men mentioned in No. 3.
5. Describe the typical interests and activities of the mother and the wife of a rich man. Compare the account in the chapter with what you know about rich people.
6. Point out passages that illustrate Engel's law in the quotation from Stuart Chase (p 128). Do you consider the people described in Chase's article as having a higher standard of living in all respects than people in the comfort or the poverty group? Explain.
7. Would the country be better off if all the people were rich? Give reasons for and against an affirmative answer.
8. Tell about a rich man who injured the community in which he lived; about a rich man who benefited the community in which he lived.

READINGS IN THE CLASS LIBRARY

1. "How Wealth Contributes to Welfare," Clay, *Economics*, pp. 434-38.
2. "The Problem of Spending," Glenn Frank, Hart, *Twentieth Century United States*, pp. 576-79.
3. "Hetty Green," Wells, *The Work, Wealth and Happiness of Mankind*, Vol. II, pp. 458-63
4. "Thomas A. Edison," *ibid.*, pp. 500-06.
5. "The Contemporary Rich," *ibid.*, pp. 520-33.
6. "The Growth of Large Fortunes," Forman, *Sidelights on Our Social and Economic History*, pp. 503-05.
7. "What Millionaires Do with Their Money," *ibid.*, pp. 506-08.



Part Three

RAISING THE LEVELS OF LIVING BY IMPROVING METHODS OF PRODUCTION

Looking Backward—and Forward

IN THE ancient and the medieval economic worlds the great majority of the people lived in poverty. One reason for such poverty was that the democratic ideal had not gained sway and the people at the top had both the power and the will to exploit their slaves and serfs. But the suffering and want were chiefly due to the lack of wealth in society as a whole rather than to inequalities in

LOOKING BACKWARD—AND FORWARD

distribution. Lacking the machinery and the knowledge necessary to produce goods in large quantities, men had no way to raise levels of living very much.

After the first hardships of the Industrial Revolution were over, the growth in general wealth that resulted from more efficient and increased production raised notably the level of living of the working classes. Indeed, advance in technical skills, rather than changes in philosophical ideas about "the good society," has been responsible for most of our progress toward ending poverty. Since the World War, the elevation of all levels of living from 1919 through 1929 corresponded to the increase in the total national income, a result due to increased productive capacity, and not to a rearrangement of social classes or a redistribution of income.

These facts mean that in order to raise the general level of living we must look primarily to bettering our national capacity for producing wealth. That is, society cannot have a higher level of living unless it produces more wealth. Our inability to absorb our produced wealth in the distressing years between 1929 and 1934 does not disprove this statement; it only emphasizes the need for a fairer division of income—a subject to be considered later. The extent of poverty and poor living which existed even at the peak of prosperity in 1929 indicates clearly the need for more material goods.

In Part Three, therefore, we shall seek to discover how production may be improved both on the farm and in the city. We shall not consider for the time being what the goods are to be used for. That is a separate problem for study later on. It is sufficient to note that no use can be made of goods until the goods are produced. In considering means of increasing production, we shall examine both machines and goods, and especially the work of the men who operate the machines, for these men are essential to the productive process. In fact, the success of production depends largely upon the workers and how they are treated.

Chapter 8

THE NEED FOR EFFICIENCY IN PRODUCTION

PRODUCTION AND ECONOMIC PROGRESS

Definition of Production. Production is the process of increasing the utility or want-satisfying power of goods. We are engaged in production whenever we change a commodity in form, place, or time so as to increase its capacity to gratify human wants. The cabinet-maker produces when he changes lumber, nails, and varnish into a chair; he creates form utility. The truck-driver produces when he brings oranges and grapefruit from Florida to New York; he creates place utility. The man who stores up ice in the winter for use in the summer increases the want-satisfying nature of the ice; he creates time utility. Thus nearly everything desirable to modern man is the result of production.

Civilized Man's Dependence on Production. Nature furnishes us raw materials: the minerals—iron, coal, lead, zinc, copper, and petroleum; the land, the air, and the water; wind, sun energy, and electricity; the forests, the wild grasses, plants, and animals. A primitive people uses nature's gifts in primitive ways. For example, Hiawatha's clothes were the tanned hides of deer, bear, and wolf; his food, the wild maize, the fruits, and the game that filled the forests; his shelter was made of skins and the bark of trees; his weapons were fashioned of forest woods, of fiber, and of stone; his transportation was provided by the birchbark canoe. But to secure such goods Hiawatha had to put forth effort, that is, he had to engage in production.

Our life at bottom is much like Hiawatha's, although in many surface respects it is very different. We depend upon the same fundamental materials, but our range is much more extended. Like Hiawatha, we spend a large part of our time in producing goods to

satisfy our wants, but our occupations are carried on mainly in field and factory instead of in wigwam and forest. The great difference between the way he lived and the way we live lies largely in the greater number of things we come to depend upon—for better or for worse. Our foods are not restricted to game and wild fruits; we search the earth to secure a varied diet. We carry our provisions from place to place in huge ships and long railway trains; we store them in chilled or heated buildings. Our shelter is not a wigwam with a vent-hole for smoke and with beaten earth for a floor. Our clothing is not limited to skins and feathers from a thousand acres of forest, but is composed of choice materials from all parts of the world.

Increasing Production Marks Economic Progress. The complicated system of production brought about by the Industrial Revolution has made possible the wide variety of goods we enjoy. It is estimated that the machinery which contributes to the ordinary surroundings of a person who lives on the comfort level today does more work than that of twenty slaves in the Golden Age of Greece.

We have seen that during the decade 1920–29 there was a tremendous advance in material wealth in the United States and that this advance resulted in better living-conditions for all classes of people. This progress was brought about by the most startling gains in production ever made in a similar period of time since the world began, without a corresponding increase in population or in the number of workers. The following table illustrates what took place.

TABLE 20

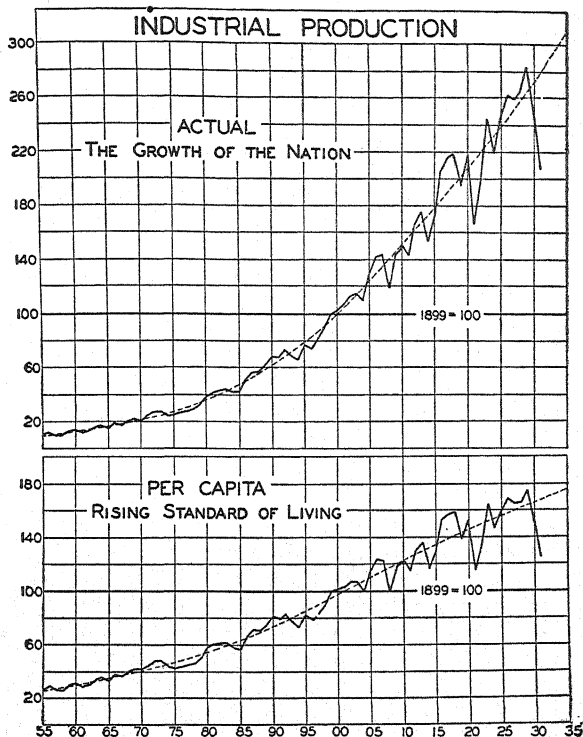
INDEX NUMBER OF PRODUCTION AND CONSTRUCTION IN THE UNITED STATES, 1922–1929 ¹

<i>Year</i>	<i>Production of Movable Goods</i>	<i>Volume of Construction</i>	<i>Total Production and Construction</i>
1922	100	100	100
1923	112	93	110
1924	109	103	109
1925	117	136	119
1926	124	143	126
1927	123	143	125
1928	129	149	131
1929	134	131	134

¹ F. C. Mills, *op. cit.*, p. 246.

At such a rate of progress it would be possible to double our productivity every thirty or forty years. But we know that it is no easy task to maintain this pace. In the first place, new inventions and

THE CLEVELAND TRUST COMPANY BUSINESS BULLETIN



The solid irregular line in the upper chart shows the annual changes in the *physical volume* of production in the United States since 1855. In the diagram at the bottom these changes of physical volume are shown on a per capita basis. The caption on this lower chart, "Rising Standard of Living," is not strictly speaking correct since purchasing power of money has not been constant during this entire period. The two dotted curves are trends or "lines of average." The figures on the left hand side are index numbers.

improvements must continue to be made in number and importance comparable to those of the past decade (1920-30). In the second place, depressions such as set in at the end of 1929 must be avoided

or lessened. Over a long period of years the trend of production is upward, but at times severe downward movements occur, and prophesies concerning our future economic well-being must take both ups and downs into account.

Money Wages and Real Wages. Although statistics show that our wealth is increasing, a thoughtful student will ask whether evidence exists that the increase has resulted in raising the standard of living of the masses of the people. One way to find out is to compare the money wages received by the average worker over a period of years. But this alone is not sufficient, because a given amount of money buys more at some times than at others. To supplement a comparison of money wages, figures are needed to show the cost of the goods ordinarily used by people, with figures revealing the money they received during the same period.

Moreover, figures do not show everything. Free education in our country has added to wages by reducing the worker's expense for the schooling of his children. Figures are also misleading to some extent. For example, a comparison of American *real wages*—the goods money wages can buy—with European real wages show that American wage rates are considerably higher than laborers receive in London, the European city with the highest wage-levels.

Wealth and Happiness. It is sometimes said that our rapid advance in material wealth has been won at the expense of more worthwhile activities—that in gathering the materials of life we have lost the ability to enjoy them. We are apt to forget, it is said, that life was not made for work, but for the cultivation of man's highest capabilities. However true this may be, it is important to remember that the higher things of life, whatever they may be, are possible only when material comfort is supplied. Genuine progress, therefore, is generally made possible only by an increase in wealth.

Even in prosperous times, we are far short of ideal efficiency in our productive system. Poverty and unemployment exist, as we have already seen (page 82), and on every side are wasteful factories, run-down systems of transportation, badly planned warehouses, and people who are made ill and irritable by the wretched conditions of modern work. Our task therefore is not only to move forward in industrial processes, but also to devise means of improving the health and efficiency of the workers.

PROGRESS IN AGRICULTURAL PRODUCTION .

Lag in Agriculture. One of the greatest of our problems is the lag in improvement in agricultural production compared with advances in industry. This statement applies, of course, to long-run production and not to the abnormal conditions between 1929 and 1934. The following table shows the contrast during the prosperity era from 1922 to 1929.

TABLE 21

PRODUCTS OF AMERICAN FARMS AND ALL OTHER PRODUCTS ²
INDEX NUMBERS OF PHYSICAL VOLUME OF PRODUCTION IN THE UNITED STATES,
1922-1929

Year	Farm Products		All Other Products		Farm Products	All Other Products
	Raw	Processed	Raw	Processed		
1922	100	100	100	100	100	100
1923	105	106	137	115	105	119
1924	110	102	130	108	107	111
1925	110	111	133	121	110	122
1926	116	112	144	131	114	133
1927	110	118	147	128	113	131
1928	116	114	146	138	115	140
1929	114	121	159	147	116	149
Percentage of average annual rate of change	+1.7	+2.6	+4.6	+5.1	+2.0	+5.1

Production per Worker. A great increase has taken place in the average production per worker on the farm. In the decade 1922-31 agricultural production per worker was about 22 per cent greater than in the preceding decade, 1912-21.³ This is a huge gain, but it is about 10 per cent less than the advance made in total national production. Furthermore, since 1926 there has been no increase in agricultural production per worker.

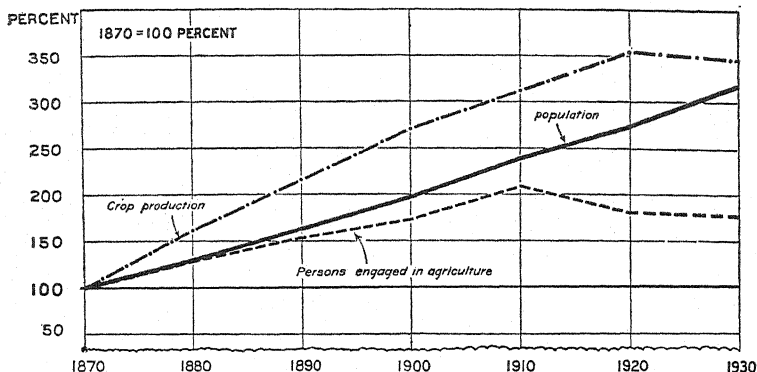
Production per Acre. Until recently the United States could be satisfied with extending the acreage of cultivated land, in that way

² *Ibid.*, p. 259.

³ *Recent Social Trends*, p. 100.

increasing the production per worker. In contrast to Europe, we had more land than workers, and we felt free to use the land carelessly. But today most of our new rich soil is occupied and our main effort henceforth must be to make each acre produce more than it

TRENDS OF TOTAL POPULATION, OF NUMBER OF PERSONS ENGAGED
IN AGRICULTURE, AND OF AGGREGATE VOLUME OF
PRODUCTION FOR 10 PRINCIPAL CROPS
United States, 1870—1930



Trends of total population, of number of persons engaged in agriculture, and of aggregate volume of production for ten principal crops, United States, 1870-1930. The chart indicates that the ratio of population to crop production has not changed greatly since 1880, but that since 1870 the volume of crop production has increased much more rapidly than the number of persons engaged in agriculture. In fact, in 1930 the index of crop production was more than double the index for persons engaged in agriculture. Some allowance should be made for the fact that the date of the census was changed from April 15 in 1910 to January 1 in 1920, a time of year when the number of persons reported as engaged in agriculture is likely to be a minimum. However, it seems clear that the amount of crops per capita and the amount per man engaged in agriculture were both considerably larger in 1930 than in 1870. (Courtesy U. S. Dept. of Agr.)

has in the past. It is here that our progress has been alarmingly slow.

During the decade in which the Civil War occurred a great increase took place not only in the acreage cultivated, but also in the average yield per acre. Machinery—the improved plow, the mower, and the reaper—doubled and trebled the effectiveness of each worker; and extensions of cultivation to good soils with natural fertility were made. As time passed, however, the effects of machinery were largely spent and the newer machines, although more efficient, have failed to make any such gains as were made by their predecessors. Exten-

sions of cultivation into the semi-arid regions east of the Rockies, where lack of rainfall has seriously limited production, have not brought the increased yield of the earlier expansions. To make matters worse, there have come the insect pests which are the bane of agriculture everywhere. As a result, production *per acre* has diminished since the beginning of the twentieth century. The following table indicates the trend since 1921.

TABLE 22

 AGRICULTURAL PRODUCTION PER ACRE IN THE UNITED STATES ⁴

Year	Wheat (Bushels)	Rye (Bushels)	Corn (Bushels)	Cotton (Pounds)
1921	12.8	13.6	29.6	124.5
1922	13.9	15.5	28.3	141.2
1923	13.4	12.2	29.3	130.6
1924	16.5	15.8	22.9	157.4
1925	12.9	11.7	28.8	167.2
1926	14.8	11.4	27.0	182.6
1927	14.9	15.9	28.1	154.5
1928	15.7	12.5	28.0	152.9
1929	13.2	12.6	26.7	155.0
1930	14.4	13.5	20.7	150.8

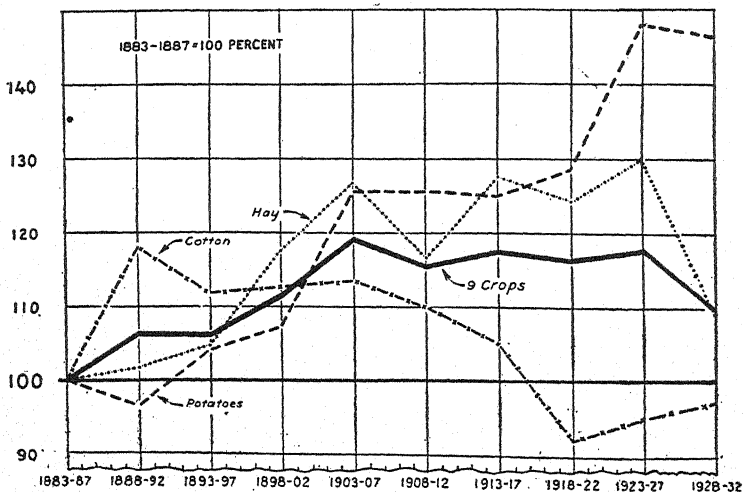
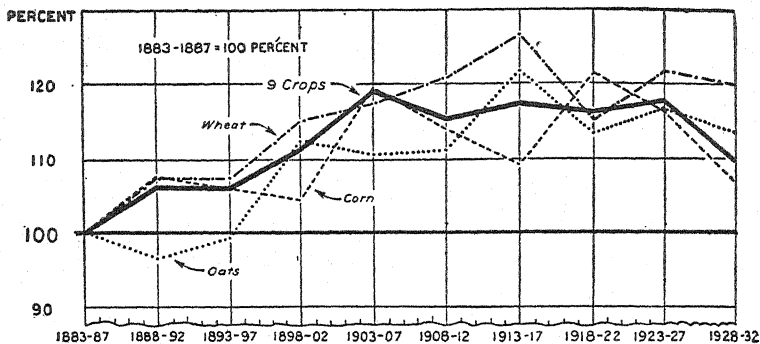
Failure to Increase Yields per Acre Serious. The agricultural problem explained above is sufficiently serious to outweigh any overconfidence in the future that might follow from the rapidly increased productivity of the manufacturing industries. If an unlimited amount of land were available, the problem would not be serious because our present agricultural production *per individual* could be kept up by bringing more new rich lands under cultivation. But land is not available in anything like the necessary quantities.

The seriousness of the situation is lessened somewhat by the fact that we have shown an ability to increase production *per worker engaged in farming* and by the fact that no decrease in production *per capita of the whole population* has so far occurred. But we have an

⁴ Adapted from *Yearbook of Agriculture, 1931*, pp. 583, 606, 615, 673. To get the proper picture for cotton, we must remember that the progress during 1921-30 was merely due to success in overcoming the ravages of the boll weevil. Cotton production per acre was 178 pounds in 1920, over 200 pounds in 1914, and over 190 pounds in 1912.

INDEX OF YIELD PER ACRE OF EACH OF SIX IMPORTANT CROPS
AND COMBINED INDEX OF NINE IMPORTANT CROPS
BY FIVE-YEAR AVERAGES, UNITED STATES

1883-87 — 1928-32



The composite curves, shown by the heavy black lines indicate a somewhat smaller average yield than we once had, though considerably above that for the first period. The composite curves were made by weighing the yield of each crop by its relative acreage in the period 1908-12. (Courtesy U. S. Dept. of Agr.)

increasing population; we desire to raise the levels of living; we depend upon the raw materials of agriculture; new land is scarce; and we are not increasing the yield per acre of the land now in use. When the situation is explained in this way, its seriousness becomes plain. Evidently improvement in agricultural production must depend chiefly upon our ability to increase yields per acre.

How Can Yield per Acre Be Increased? The possibilities for increasing the yield per acre seem endless. New inventions of machinery, new processes of cultivation, new controls of destructive pests, new successes in breeding for resistance to disease and for increased yield, are all taking place. He would be a rash person indeed who would say that agricultural methods will not be revolutionized within the next decade. But we do not need to depend upon such possible developments. As shown in the accompanying table, Europeans have already achieved tremendous yields per acre, and what they have done we too can do.

TABLE 23

AVERAGE YIELD PER ACRE OF VARIOUS CROPS IN CERTAIN COUNTRIES COMPARED WITH YIELD PER ACRE IN THE UNITED STATES, 1929-1930 ⁵

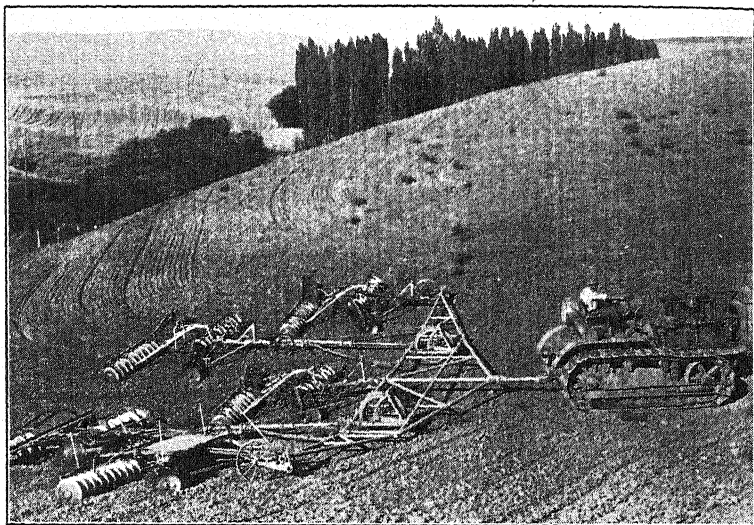
<i>Crop by Bushels</i>	<i>United States</i>	<i>Canada</i>	<i>France</i>	<i>Italy</i>	<i>Russia</i>	<i>Germany</i>	<i>Denmark</i>
Wheat	13.2	12.1	25.1	22.1	8.7	31.1	45.8
Rye	12.6	13.3	20.4	22.4	11.9	27.5	27.7
Barley	17.3	23.2	31.9	20.8	16.3	38.1	56.2
	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
Sugar beets	10.6	8.5	9.7	11.0	3.6	10.9	13.5

Agricultural efficiency is superior in Europe because of the longer experience of Europeans with the intensive cultivation of land, because of a larger proportion of fertile land, and because of better control of farm production by the government. When Germany wishes to raise the starch content of the potato, the German Government sees to it that seed is planted which will accomplish the desired result. Our own Department of Agriculture might do as much for us if it were given an opportunity.

However, our problem cannot be wholly solved by adopting European methods of cultivation. Our conditions may be different. But

⁵ Adapted from *Yearbook of Agriculture*, 1931, pp. 590, 608, 642, 692.

in this respect the Land Utilization Committee of the Department of Agriculture reassures us by reporting that for our ten principal crops, which occupy 90 per cent of our crop area, we may expect an average increase of nearly 50 per cent. They say that "if this



This one multiple hitch tractor is pulling five 10-foot double disk implements for spring fitting. Such utilization of machinery on the farm requires the great, clean spaces of land found only on the large, high-grade farm. It requires also a farmer of intelligence and some technical training. (Courtesy Caterpillar Tractor Co.)

increase in yield of crop land could be achieved by the time our population reaches 150,000,000 (estimated at about three decades), we should require only 269,662,000 acres, about 34,000,000 acres less than we used for domestic consumption in 1920." They say further, however, that "when we remember that there has been no increase in average yield per crop acre in the past two decades . . . [the suggested increase] seems improbable." Here then is our problem again: the intelligent use of nature's gifts.

Significance of the Agricultural Lag. Our experience in both agricultural and industrial production shows that, although the possibilities of progress in each are limitless, industrial advance greatly

exceeds agricultural progress. This means that we are failing to provide the sound foundation in raw-material strength that is necessary to continued industrial progress; instead, we are paying too much attention to the making of raw materials into goods. It is necessary



Planting potatoes on a Missouri farm. Compare the possibilities of this process with those of a farm-hand stooping along the earth with the seed in a sack or basket, and inserting it in the ground with his hands. (Courtesy Caterpillar Tractor Co.)

to recognize agricultural activities as the prime source of national economic strength and to bring about a corresponding change in emphasis throughout the nation.

GOALS OF PRODUCTION

Efficiency Ideal. At least three possible results may be sought in production, any one of which involves higher levels of living. The first and perhaps the most prominent result is to make production more efficient; that is, to produce as great a quantity of goods as possible, of as high a quality as possible, and as cheaply as possible. This is sometimes called the efficiency ideal. Apparently we are making progress toward this goal; and it must be clear that greater efficiency will finally result in an improvement in the level of living

because greater production means a larger national income over a long period of time.

Ideal of Pleasing Work. The second goal, scarcely less important than efficiency, is to make the working-life as humanly satisfying and as beneficial as possible. It has become increasingly apparent that unless the working-life is made more satisfactory to the individuals who work, there will be constant unrest, and even revolts against the difficult conditions that exist.

The idea that work may be an end in itself, enjoyable for its own sake, is one which spreads rapidly. This aim was less apparent during the early development of the industrial system than it has since become, perhaps because it was difficult to see how anyone could find joy in industrial activity in the midst of whirling machinery and the grime and dust of ugly factories. Improvements in factory-planning, however, have made happiness more attainable in industrial as well as in other activities of life. An individual's greatest and perhaps his best efforts are spent in his working-life; making that life more satisfactory to him is therefore as important as bettering any of the other conditions of his existence.

Ideal of Leisure. The third goal to keep in mind is that the work ought to help rather than prevent workers from enjoying the leisure time made possible by the shortening of the working-day. The nature of industry should be such that its hardships do not render men incapable of enjoying intervals of rest and diversion. Men's minds should not be dulled nor their bodies warped by being sacrificed to the productive process.

SUMMARY

Production increases the utility of goods. Civilized man depends on production for most of his needs, and economic progress is largely the result of increasing productive skill. The improvement in levels of living in the United States from the World War to 1930 corresponded almost exactly to the advances in the production of goods. These advances indicate that it is possible to double our economic well-being in three decades. To do this, we must intensify our search for more efficient techniques in production and we must also make the industrial system run more smoothly, without such depressions as that which began in 1929.

The lag in agricultural production presents a serious problem. Yield per man has increased greatly, but less than in other fields of production and not at all since 1926. Yield per acre, which is today the crucial problem, has actually decreased since 1900. Intelligent effort, based upon a recognition of agriculture's prime importance to society, should bring marked improvements.

The aims of production are efficiency in industry and agriculture, more enjoyable working-conditions, and greater leisure for the men behind the machines and in the fields.

QUESTIONS AND PROBLEMS

1. Explain the meaning of *production*. Mention examples of production you have noticed on your way to school. Give an illustration of production you engaged in during the past week.
2. Are the following persons, when occupied with the activity suggested by their callings, engaged in production? An attendant at a gasoline station; the conductor on a street car; a student preparing an assignment; a gambler; an ex-soldier selling apples on the street corner; a postman; a burglar; a dentist; a lecturer; a stenographer; a miner; a fisherman; a policeman; a teacher. In each instance give reasons for your answer.
3. What does the word *utility* mean? Give original examples of the creation of (a) form utility, (b) place utility, and (c) time utility. Which kind or kinds of utility does a grocer create? Explain.
4. Read E. E. Slosson's "How Man Uses Nature" in Hill, *Readings in Vocational Life*, pp. 19-20. Explain with original illustrations each of the three stages in man's conquest of nature.
5. How is modern industry a roundabout method of work? Illustrate with a diagram.
6. Tell why progress in industrial efficiency has been exceptionally rapid in recent years. Can you give an instance of such progress in your community?
7. John Ruskin, who wrote of *illth* as the opposite of *wealth*, meant by the latter term the *good* it was able to do society. He said that the production of *illth* was caused by perverted wants. Using the word as he meant it, list as many ways as you can by which *illth* is produced. Be able to give examples of each way.
8. Has the number of jobs grown fewer as efficiency in production has grown greater? Give reasons. If you answer in the affirmative, explain the problem created and suggest ways of solving it.
9. How can one tell whether the general standard of living is raised as the wealth of the country increases? Illustrate.

10. Define *wealth*. Mention examples of wealth in (a) your home, (b) this classroom, and (c) the community.
11. Explain with the help of original examples the meaning of *money wages* and *real wages*. If you were a wage-earner, which of the two would you prefer to see go up? Why?
12. Why have not improvements in agricultural production kept pace with improvements in industrial production? Cite evidence that shows that agricultural progress has gone forward more slowly. In what ways does the agricultural situation present serious problems?
13. Criticize or evaluate the *efficiency ideal* in production. Bring to class a newspaper clipping that illustrates this ideal.
14. Should an individual plan his occupation and savings so that he can quit work when he reaches a certain age, or should he plan to continue to work as long as he is physically able? Volunteer to support one side of this question. Have a debate on the problem in class.
15. Is work an end in itself, or is it a means to an end? Can it be both? Explain. How does the question relate to this chapter?
16. Explain the relation that ought to exist between work and leisure. Mention persons who seem to illustrate the ideal suggested by your explanation. Is such an ideal always attainable? Explain.
17. *Special report for a volunteer*: Secure a copy of Adriano Tilgher's *Work* and read the class the descriptions of several different attitudes toward labor.

READINGS IN THE CLASS LIBRARY

1. "Why Work?" J. H. Snowden, Hill, *Readings in Vocational Life*, pp. 5-7.
2. "The Dignity of Work," Thomas Carlyle, *ibid.*, pp. 14-15.
3. "The Roundabout Method of Work," E. Böhm von Bawerk, *ibid.*, pp. 17-19.
4. "How Man Uses Nature," E. Slosson, *ibid.*, pp. 19-20.
5. "Measuring the Efficiency of Workers," Nicholas Ricciardi, *ibid.*, pp. 615-16.
6. "The Division of Labor," Clay, *Economics*, pp. 21-45.
7. "Keep on Working," R. E. Burton, Center, *The Worker and His Work*, pp. 39-41.
8. "Conditions of Industrial Progress," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 738-39.
9. "Henry Ford," Wells, *The Work, Wealth and Happiness of Mankind*, Vol. II, pp. 506-15.
10. "Incentives for Work," Marshall and Wiese, *Modern Business*, pp. 206-14.
11. "Proportionality in Industry," A. S. Dewing, Weld and Tostlebe, *A Case Book for Economics*, pp. 84-86.
12. "Dock Labor and Power Trucks," H. J. Payne, *ibid.*, pp. 88-91.

Chapter 9

IMPROVING METHODS OF PRODUCTION ON THE FARM

BASIC CONDITIONS FOR AGRICULTURAL SUCCESS

The Problem to Be Considered. In the last chapter we discussed the need of improving the technique of agricultural production. In this chapter we are to consider the means of achieving this end. It is true that it may be of no benefit to grow more crops until there is a favorable market for them, or until the whole agricultural problem is solved. Moreover, it must be remembered that the conditions during the depression years of 1929 to 1934 were abnormal, and that we are here concerned with long-run farm production. Other aspects of the farm question will be discussed later on; in this chapter we shall examine merely the basic task of improving production on the farm.

Need for Fertile Land. If land is naturally poor or if its fertility has been exhausted, it will not yield abundant crops. In general, American agriculture has been very wasteful, and much good land has been despoiled. In New England, and even in the rich hill country of New York and Ohio, improper methods of cultivation for generations have destroyed the soil. Fertilizers have been used but sparingly except in a few sections of the country, and the elements of fertility removed from the soil have not been restored. The large acreage of row crops, such as corn and cotton, where the land is exposed to rains at all times, has led to widespread soil erosion. In the northern hay and pasture lands, most of the losses in soil resources have been due to removal of the crops and to leaching by rain.¹ Then, too, much land is naturally poor—for example, the hill lands of New England,

¹ See *Recent Social Trends*, Vol. I, pp. 93-94.

parts of the Southeastern states, and the Sierra and northern coast countries of California.

Possibilities of Soil Restoration. Soil that has been exhausted by causes other than erosion may be restored by proper tillage and fertilization, as is shown by recovery of many abandoned New England farms. The losses by crop removal and leaching can be restored, for the deposits of minerals capable of reviving the soil seem sufficient for many generations. The manufacture of synthetic nitrogen fertilizers assures a practically endless supply at slight expense. Our deposits of phosphate fertilizer are adequate for several centuries. Recent discoveries in Texas and New Mexico indicate a potassium deposit of boundless possibilities. Such elements are all that are necessary to the soil that has been exhausted over extensive areas by crop removals, grazing, and leaching.² Soil erosion is a more serious problem that will be considered later in the chapter.

Reclamation. Although we cannot increase our land area, we can add to the area that is productive by reclaiming wet lands, by clearing cut-over tracts, and by irrigating arid regions. Much of such work has already been accomplished; cut-over lands in Michigan, Minnesota, and other Northern states, swamps along the Atlantic coast, and dry lands in the West have been made productive. But large areas remain to be reclaimed,—a task that will require a vast expenditure of public money, which at present is yielded very reluctantly. A growing population may some day force us to take measures which now seem unnecessary, such as storing the flood waters of the Mississippi and diverting them to the great arid regions of the Western plains.

Optimum Farm Size. A farmer must have a sufficient number of acres to employ his time and talents to the best advantage. In Belgium, France, and Germany the division and redivision of the land among heirs has so reduced the size of holdings that families are able to exist only by the utmost frugality, and nothing like American farm comfort is possible. In certain Chinese river valleys the land is as fertile as anywhere, but the plots of the farmers have been so reduced in size that they average only a few acres, and in some places there are as many as three or four farmers to the acre. Professor J. R. Smith³ comments that “at this astonishing rate one square

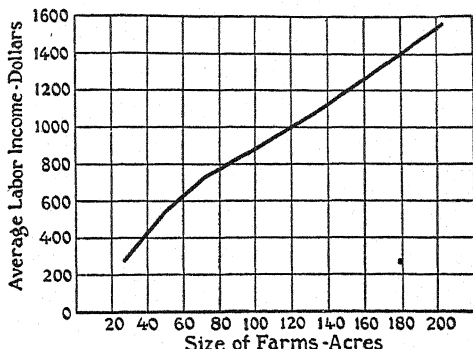
² *Ibid.*, pp. 94-95.

³ J. R. Smith, *The World's Food Resources* (Holt, 1919), p. 520.

mile could maintain 3,072 persons, 256 cows, 256 donkeys, and 512 pigs. It would be impossible to find an American square mile that could feed, under American methods, the animals alone, to say nothing of the people." The result of such conditions reduces most of the population to the poverty level.

The optimum size for a farm depends upon the kind of agriculture that is carried on and the character of the soil and climate. M. B. Waite⁴ tells of a Pennsylvania farmer with a 400-acre farm who found after selling 100 acres that by giving better attention to the remaining 300 acres his sales were in no wise reduced. Later, after selling 200 acres more and centering all his energies on the remaining 100-acre farm, he made the land produce as much as the original 400 acres.

It must not be supposed, however, that it is possible to reduce the size of farms indefinitely and still have an increase in efficiency. In the fertile prairies of the West it has even proved advantageous to increase the size of farms and to apply machinery to the larger holdings. The large cotton plantation continues to exist on the more level and fertile lands of the South. The



This chart shows that labor incomes from 378 owner farms of the general dairying type usually found in the eastern United States are greater as the size of the farms increases—at least up to 200 acres. A farmer is under a handicap on this type of farm if he tries to operate with too small a unit. "Labor income" is the net income of the farm less 5 per cent interest on the capital invested. (From "Farm Management Practice of Chester County, Pa.," U. S. Dept. of Agr. *Bulletin 341*.)

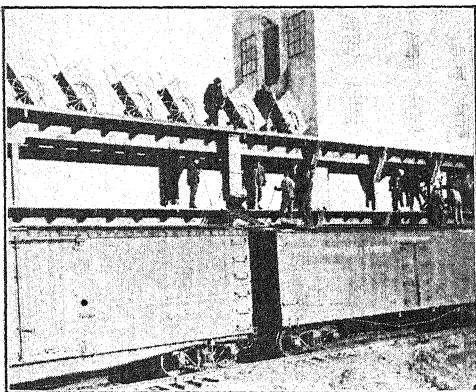
size for an efficient dairy farm is not at all suitable for an efficient fruit or truck farm. In like manner farms in the cornlands of Indiana have a different efficiency-size than farms in the wheatlands of the Dakotas, the cotton lands of Texas, or the potato lands of Maine. One dairy farm will make several farm units for the growing of lettuce, spinach, celery, or cabbages.

⁴ *Yearbook of Agriculture 1904*, pp. 172-73.

Favorable Location. The maintenance of a comfort level of living on a farm depends usually upon a favorable location, which generally means access to markets. Land in New Jersey near New York City yields a higher income per acre than equally fertile land in Missouri or Tennessee. When the land is near the consumer, it is possible to grow vegetables and fruits that are highly perishable and which bring the highest prices. On equally good land lacking such excellent marketing facilities less perishable and less valuable crops must be grown or a higher transportation cost must be paid; thus the poorer

location results in a lower net income to the farmer and in a lower level of living.

Some farmers who lack easy access to markets have advantages which tend to offset their disadvantages. Although it costs more to transport celery to New York from Michigan than from New Jersey, the farmer has to pay more for land in New Jersey. Furthermore, the transportation has become much more efficient in recent years.



Here we see a railroad side track built next to an ice plant, in order to facilitate speedy refrigeration of the cars. By these methods, the delicate fruits of California are made available on the tables of Boston. (Courtesy Pennsylvania R. R.)

Refrigeration and motor trucks have both improved marketing facilities. The quick freezing of meat and vegetables promotes their transportation. Refrigerator cars have made it possible to market the fruits of southern California in Detroit and the peaches from the shores of Lake Ontario in St. Louis or Omaha, and glass-lined tank cars are used in summer to carry milk from Wisconsin to Florida. In 1930 refrigeration cars were built which create cold from the turning of the wheels. Frozen carbon (dry ice), though expensive, is also used.⁵

Favorable Climate. If the human race ever learns to control the hours of sunshine in the week or the amount of water that falls upon

⁵ *Recent Social Trends*, Vol. I, p. 142.

the land, the greatest gain upon nature ever made by the human race will occur. Every farmer lives at the mercy of the weather to a degree which cannot be understood by anyone who has not lived upon the land. A summer shower upon a field of newly cut hay, a few days of burning sunshine upon a field of seedlings, or a night of frost in early September may destroy a farmer's chances to attain a comfort level of life for a year or more.

So long as a week of continuous rain upon the full bloom of peach trees can destroy millions of bushels of potential fruit, or so long as a half-inch difference in rainfall can cause a quarter of a million people to move out of one state in a year or two (as has actually happened in western Kansas), human beings will live somewhat precariously upon the land. It is not strange that the most frequent topic of talk among farmers is the weather.

ADVANCEMENT IN THE AGRICULTURAL ARTS

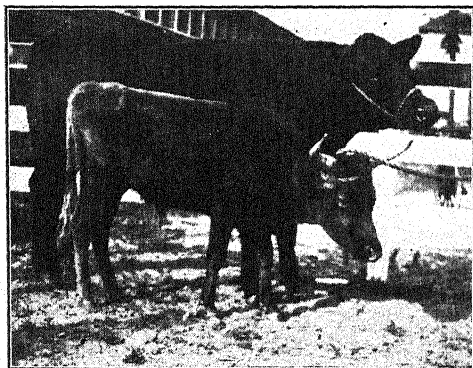
Crop Rotation. Our chances of controlling levels of living are probably not greater in any department of life than in agriculture. The history of the use of land shows a continuous record of improvement, yet its greatest achievements may well lie in the future. The revolution in agriculture which brought in continuous planting, or rotation of crops, instead of allowing land to lie fallow every third year, as on the medieval manor, made the Industrial Revolution possible, for the new agriculture released people from the land to work in the factories and provided the food for their support as well as the raw materials for the new manufactures.

Although the need for rotating crops was discovered many years ago, there are even today many thousands of acres of otherwise productive land lying fallow because of ignorance of the laws of rotation or because of failure to follow them. The cotton area of the South is still largely a one-crop section; this is equally true of most of the wheatlands of the Northwest. There is still much room for improvement in crop rotation.

Scientific Stock-Breeding and Seed Experimentation. Man has always depended upon plants and animals for food and clothing. In primitive times for his supply of food and clothing he depended upon his skill as a hunter and his ability to wrest from nature such things as fruits, nuts, and wild grains. The desire to increase and control

this supply led man early to cultivate those plants from which he had obtained useful seeds and fruits and to domesticate some of the animals captured in the chase. This tremendous step forward greatly reduced the intensity of the struggle to maintain the balance between need and supply.

As rising levels of living and the growth of population threatened the balance between need and supply, man again faced the problem



A year-old Aberdeen-Angus steer (the larger one) and a three-and-one-half year-old Piney-woods steer—a graphic representation of the results of biologic science, and with obvious implications for agriculture. (Courtesy U. S. Dept. of Agr.)

of obtaining increased quantities of food and clothing. There were, to be sure, many wild plants which might be brought under cultivation and many animals which might be domesticated; instead of devoting his energies to such ends man turned his attention to methods of selecting and breeding plants and animals with which he was familiar. For centuries breeders selected the more desirable animals for continuing their live stock, but not until the

close of the nineteenth century was any definite attempt made to develop a science of breeding. Since that time much progress in breeding has been made. The things we eat, the clothes we wear, even the flowers which brighten our gardens and homes have been improved in various ways by the scientific breeder. His achievements range from hornless cattle to seedless oranges; from American Beauty roses to rust-resisting wheat. Perhaps his greatest work so far has been the improving of grain and live stock, varying the oil or starch content of corn, increasing the yield and breeding for greater disease-resistance in wheat, and producing animals with more meat or milk or wool than the original specimens possessed.

Need for Encouraging Further Experimentation. An important movement is now in progress throughout the country for better stock

and better seed. Stock shows, country fairs, stock-judging contests, demonstration trains, corn and pig clubs, agricultural colleges, governmental agencies, and Farm Bureau agents are all coöperating in helping the farmer raise the levels of production. But in spite of the great advances that have been made we have yet much to achieve. We need better dairy and beef herds; we need to increase the number of disease-resisting types among both plants and animals; and we need varieties of fruits and vegetables that are better adapted for shipping.

MEETING THE HAZARDS OF PRODUCTION

Insect pests, plant and animal diseases, and adverse weather conditions are the greatest enemies of the farmer. The control and destruction of such enemies offer another means of raising the levels of production on the farm.

Adapting Farming to Conditions of Climate. As yet we have found no way to control climatic conditions; instead, we have altered our methods of production to meet the hazards caused by adverse weather and climate. We have bred and selected new types that are better able to withstand cold or heat, drought or excessive moisture. We have produced varieties of corn which yield abundantly in northern regions, and new varieties of wheat which can be grown profitably in Southern states.

Specialists sent out by the United States Department of Agriculture search the corners of the globe for new crop plants and new varieties of plants already known to us. Due to their researches, hardier and more productive plants are introduced. Alfalfa, introduced from Central Asia about 1854, has now become one of the main crops in many Western states. Rice from Japan, navel oranges from Brazil, durum wheat from Russia, cotton from Egypt, dates and figs from Asia Minor, are only a few of the many varieties which have been brought into the United States by the plant-hunters of the Department. Most of these crops have become so firmly fixed upon our farms that we seldom think of the romance and adventure that lie back of their introduction into this country.

Protection against Adverse Climate. While the biologist and the explorer have provided us with new and more effective crop plants, with the help of the engineer the practical farmer has developed

methods to overcome dangers from nature. The use of smudges and fires to protect orchards and other crops from damages by frost is now a proved success. Greenhouse culture has reached a high state of efficiency. Experiments with the use of artificial light for maturing



"Smudging" in an orchard to protect blossoms or young fruit from frost. This work requires both skill and the assistance of governmental weather bureaus. (Courtesy U. S. Dept. of Agr.)

certain plants, especially flowers, and for increasing egg production have yielded gratifying results.

Creating Artificial Climate: Irrigation. Our greatest progress, however, has probably been made in supplying moisture to the great arid district that lies between the Missouri River and the Rockies. Irrigation is an old art. It was practiced

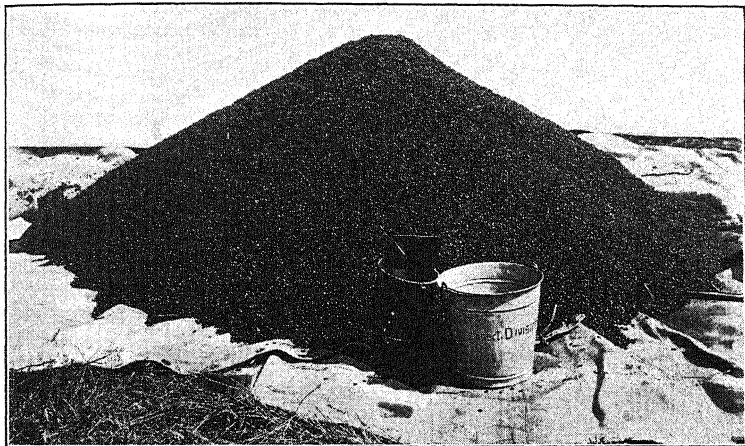
very early in most parts of the world, especially in Egypt, China, and India, and by the Indians of an early period in both North and South America. The actual methods of applying the water to the field have probably changed but little from those times to ours. Progress has been rather in increasing the size of operations and the efficiency of construction. Modern irrigating projects, with their miles of distributing canals, tunnels cutting through mountains, and enormous dams, bulk as worthy monuments of our civilization.

Dry Farming. Supplementing irrigation, though less extensive, is the practice of *dry farming*, the tilling of the soil so as to conserve as much of the soil moisture as possible. In dry farming the top layer of the soil is kept loose to reduce the evaporation of the moisture from the surface.

Foresight in Combating Natural Hazards. Although the farmer cannot control the elements, he may at times protect himself with a sufficient surplus through savings to overcome the losses caused by drought, flood, and frost. When farmers learn to expect rainy days,

rather than to live in the false hope that climate is changing for the better, rainy days will lose power over their lives. The comfort level in rural life is impossible without wise foresight.

Pests and Diseases. The control of insects and other pests and diseases affecting our plant and animal crops is no less a problem than the control of climatic hazards. Governmental experts estimate that about 10 per cent of the total crop value of the country is lost



A mound of Japanese beetles containing 1,876 pounds or approximately 10,000,000 beetles caught in 500 traps. (Courtesy U. S. Dept. of Agr.)

through pests and diseases. The more important losses are caused by grain rusts, blights, cattle and sheep ticks, the cotton boll weevil and cotton boll worm, the foot-and-mouth disease, the white-pine blister rust, the corn-borer, the gypsy moth, the San José scale, anthrax, hog cholera, tuberculosis, the Hessian fly, the alfalfa weevil, and the Mediterranean fruit fly. The boll weevil alone destroys nearly \$200,000,000 worth of growing cotton every year. If we could eliminate or even control such destructive agencies, we should add greatly to the productive efficiency of the country.

Fighting Foreign Pests. Many of the pests and diseases just named are not native to this country, but have been brought here in shipments of plants, broom corn or grass, in straw packing, and in imported seeds. The corn-borer is a striking example. This pest

entered the country some time between 1909 and 1914 in broom corn shipped from Italy to Boston. It now threatens the whole corn-growing area of the United States. The federal Government has spent millions of dollars in an attempt at control, but with only moderate success. The introduction of new pests has made control and destruction a serious problem. When the boll weevil, the corn-borer, and the Hessian fly are suddenly thrown into a new environment practically free from their natural enemies, they increase at a tremendous rate. The San José scale almost wiped out the citrus-fruit industry of California and was not conquered until the Australian ladybird (a small red beetle) was shipped in and its numbers increased sufficiently to combat the scale.⁶

Control of Pests and Diseases. Life in the insect world is organized on a basis of checks and balances. The control of the corn-borer, for example, was found to depend upon the discovery of its enemies. Search finally revealed that a minute parasite found in southern France preyed on it. This parasite has been introduced into the infested section of the country with some success. But the methods of control vary with the pest or the disease. The following are the more important and more widely used methods:

1. Spraying and dusting (fruit trees and garden vegetables)
2. Burning (tomato vines for mosaic and cotton stalks for weevils)
3. Introduction of natural enemies (parasitic enemies of the corn-borer, etc.)
4. Dipping (cattle and sheep for ticks)
5. Vaccination and inoculation (live stock)
6. Quarantine of infested areas (stock or plant epidemics)
7. Tillage (special methods of tillage for plant protection)

More extensive research in methods of control and destruction are needed, as well as a larger corps of inspectors at the ports of entry to watch for dangerous pests and diseases. Larger appropriations to enable the Department of Agriculture to enlarge its work of experimentation and investigation are also very desirable.

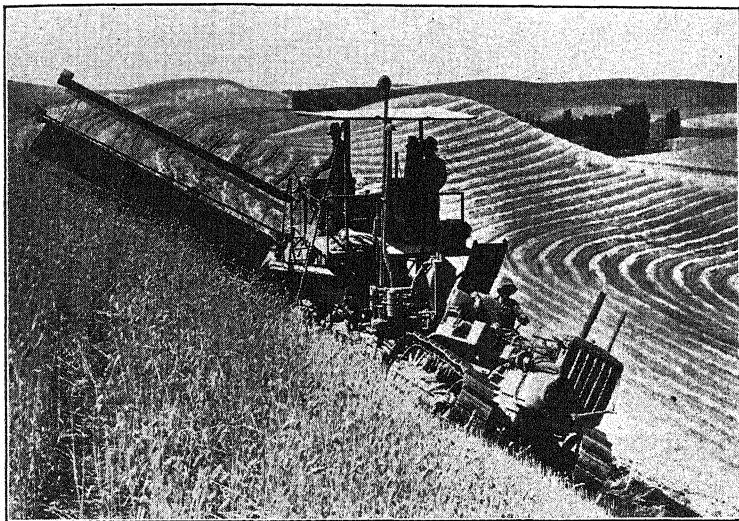
POWER AND MACHINERY ON THE FARM

Power on the Farm Has Increased Production. The period since the Civil War is sometimes called the age of machine agriculture.

⁶Citrus fruits in Florida are now similarly menaced by the Mediterranean fruit fly.

Before the war grain was generally sown by hand, reaped with a cradle, and threshed with a flail. Hay was ordinarily mown with a scythe, and corn was planted and cultivated with a hoe.

In 1831 William Manning of New Jersey patented the first mowing machine. Within the next three years Obed Hussey and Cyrus H.



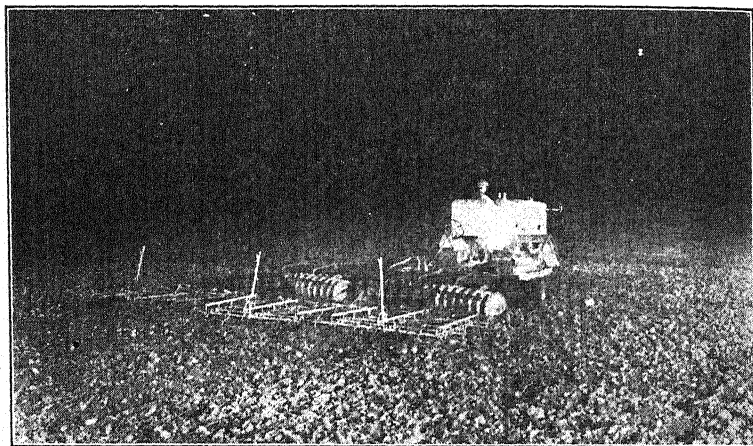
The modern cutting and binding machine requires three or four men to operate it. But it can do the work of two dozen men using the old-fashioned cradle. (Courtesy Caterpillar Tractor Co.)

McCormick patented reaping machines. By 1840 machines had practically replaced hand methods of threshing.

The advantages of the machines over the older methods were striking. In a 10-hour day a man using 3 horses and a 14-inch walking plow could turn over $2\frac{3}{10}$ acres; in the same length of day a man operating a Diesel tractor with 12 16-inch plows can turn over 65 acres. With the old-fashioned cradle one man could cut 2 acres of wheat in a day; with a modern cutting and binding machine and 4 horses one man can cut 18 acres in a day, and of course the labor of swinging the cradle far exceeds that of operating a binder. A tractor, pulling gang plows, harrows, and seeders, can prepare and seed from 80 to 100 acres in a day. Many more comparisons might be given,

but they would all point to the same conclusion: that increased farm production in the United States has depended very largely upon the introduction of power and labor-saving tools.

Since 1900 the increasing production per farm worker has been very similar in rate to the application of power on the farm. Animal power per male worker on farms has varied between 1.4 and 2.1 horse power during the past eighty years. Mechanical power per male



The twenty-four-hour day on the farm. An Illinois farmer rushing the plowing for winter wheat. (Courtesy Caterpillar Tractor Co.)

worker increased from 0.1 horse power in 1880 to 5.6 horse power in 1930. Total horse power per male worker increased from about 1.5 horse power in 1850 to 2.5 in 1900 and 7.4 in 1930.⁷

Substitution of Tractors for Horses and Mules. Between 1918 and 1932 about 9,000,000 horses and mules disappeared from American farms as a result of the introduction of the tractor. The disuse of so many horses and mules released about 30,000,000 acres of land, which had been needed to produce their feed, which could now be used to raise meat and milk animals, and to grow cotton and wheat.⁸ The tractor has many advantages over the horse. It can be used for much longer hours during the busy seasons of the year. A ten-hour day is as much as a horse can stand, but with the help of head-

⁷ *Recent Social Trends*, Vol. I, pp. 101-02.

⁸ *Ibid.*, p. 105.

lights a tractor can be used twenty-four hours a day, except for time taken out for repairs. A horse must be rested many times during the course of a day, and at the end it goes to the stable exhausted. On a farm of 160 acres or more a heavy strain consequently falls upon the horses used on the farm. Crops should be planted and harvested during good weather. At such times the tractor is most serviceable. However, animal power remains the chief source of energy for farmers. Most of them have not the funds necessary to make the initial outlays necessary to equip a farm properly.

Recent Developments in Farm Power. To see the recent uses of machinery on the farm we generally must turn to the large-scale farmer. The largest wheat farm in the world, that of Mr. Thomas D. Campbell of Montana, has perfected the most revolutionary harvesting machine for grain since the advent of the binder. Before Mr. Campbell's device, there had been a machine for cutting the standing grain and threshing it in one operation. But this device could be used only on dead-ripe grain free from weeds. The new machine can be used in any field of wheat and can pick up and thresh wheat which has been cut by another machine and allowed to dry. The new method reduces the total cost of harvesting and threshing from \$4 to \$2 an acre. It is as applicable to a small farm as to a large one. When it comes into general use the average grain-farmer will complete threshing two days after he has finished harvesting, the cost will be cut in half, and the farmer's wife will be free from the drudgery of feeding the crews engaged in harvesting and threshing.⁹

Another recent improvement on large farms is the green-feed dehydrator, which serves to remove rain water or other excess moisture from crops which have been lying exposed in the fields.¹⁰ A huge rotating cylinder is set at an angle and heated at the upper end. The forage crop is first chopped, and then raised and dropped into the upper end of the tube. The heat removes the moisture, and the material is dehydrated by the time it reaches the bottom of the cylinder, at which point the feed enters a cooling chamber and is then elevated to bins for storage. This machine has a capacity of 2,000 pounds of dry alfalfa hay per hour. It makes a better product

⁹ From an account in the *New York Times*, September 12, 1926.

¹⁰ The following descriptions are from O. M. Kile, *The New Agriculture*, Macmillan, 1932.

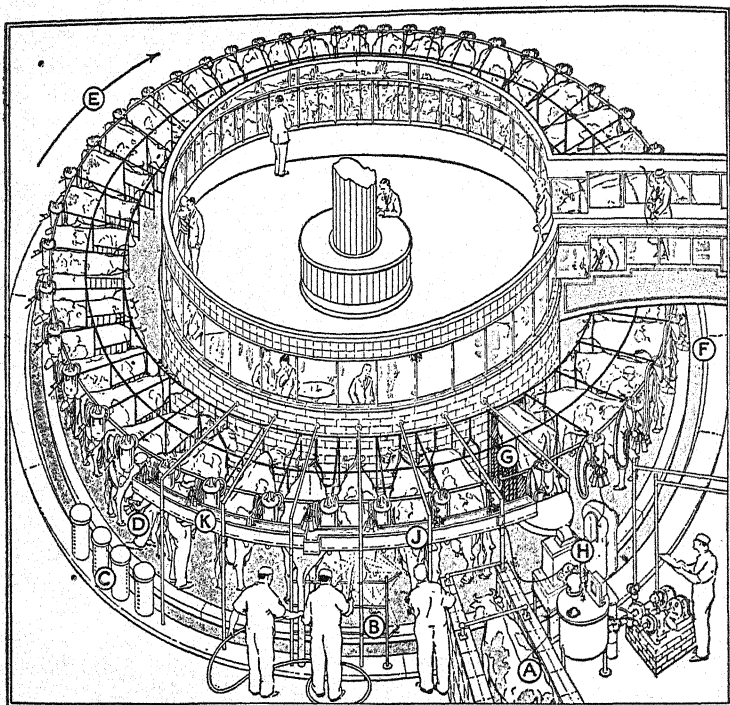


Diagram shows how the "Rotoractor" works. (A)—The cows step onto the moving platform. (B)—The cows are washed almost automatically. (C)—The cows are dried by hot air. (D)—The milking machines are put on. (E)—The platform moves 15 feet per minute in this direction, and completes a revolution in $12\frac{1}{2}$ minutes. (F)—The milking machines are taken off here. (G)—The cows step off the platform and go back to their barns. (H)—The milk is automatically dumped from the Pyrex jars, weighed, and piped to the bottling room. (J)—The milking machine is thoroughly rinsed in cold water. (K)—The milking machine is sterilized by hot water before being used on another cow. (Courtesy Walker Gordon Milk Co.)

and permits feeds to be grown where they grow best, regardless of whether or not the climate is suitable for sun-curing.

The rotolactor, or rotary milking machine, is another example of what may be done on a large dairy farm. In less than fifteen minutes, fifty cows are washed, dried, tested as to the quality of their milk, and milked, and the milk drawn through sterilized air-tight tubes to

individual sealed fireproof glass containers and emptied into automatic weighing and recording machines.

In the fall of 1930 a new development promised to revolutionize the method of harvesting corn. Corn was cut with a wheat combine fitted with pick-up and cutting devices, threshed, and shelled in one operation, and then delivered to galvanized steel tanks so constructed as to protect the grains from moisture.

Cotton growing and picking has not been improved very rapidly by the application of machinery, but experiments have shown the tremendous advantages to be gained from the use of power. The Delta Experiment Station at Stoneville, Mississippi, found that the average per-acre production cost on tractor-operated plantations was \$35.61, or \$24.95 less than the average cost on tenant-operated plantations.¹¹ Further progress awaits the perfecting of a cotton-picking machine. Several pickers are now in use, and it is estimated that mechanical picking will revolutionize cotton production and cut costs perhaps 50 per cent. Without awaiting the picker, parts of the Southwest have used a *sledder*, which strips off the cotton bolls along with the leaves and stems, and employ a special gin to remove the foreign matter. Equipped with a tractor, a four-row cultivator, and a stripper, one man can grow and harvest 200 acres of cotton as contrasted with the 15 or 20 acres handled by an entire family in the far South.

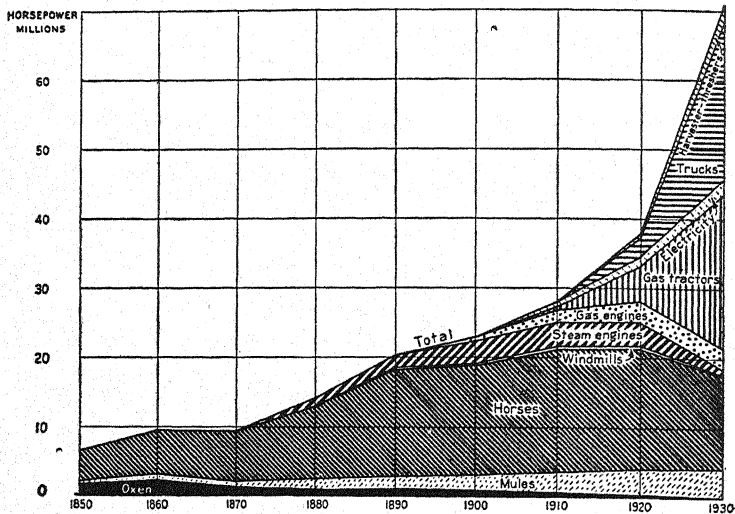
Sources of Farm Power: Wind and Water. Power machines have proved especially useful in such operations as pumping water, sawing wood, threshing, grinding grain, and operating milking machines and cream separators. Wind motors of various sorts have been used for years to perform many of these operations. It is remarkable, therefore, that no marked change has taken place in mechanisms for the wind as a source of power. Interesting experiments have been made, however, in using windmills to drive dynamos, the current thus produced being utilized in portable motors about the farm and for lighting purposes. Storage batteries have also been utilized for storing excess current to use when the wind does not blow.

Water motors have been employed only to a small extent as a means of supplying power on the farm, chiefly because few farms are located where water power is available. Some communities, however, have developed coöperative means of producing electric

¹¹ Delta Experiment Station, *Bulletin* No. 290 (February, 1931).

current from water power to supply farms in the vicinity with current for lighting and for motors.

ESTIMATED TOTAL HORSEPOWER AVAILABLE ON FARMS OF U.S.



(Courtesy U. S. Dept. of Agr.)

Improvement of Farm Buildings. The improvement of farm buildings has also contributed toward raising the levels of production. Better buildings have helped to protect stock, machinery, and crops against weather and pests. Properly arranged, they have also promoted efficiency and convenience in farm operation.

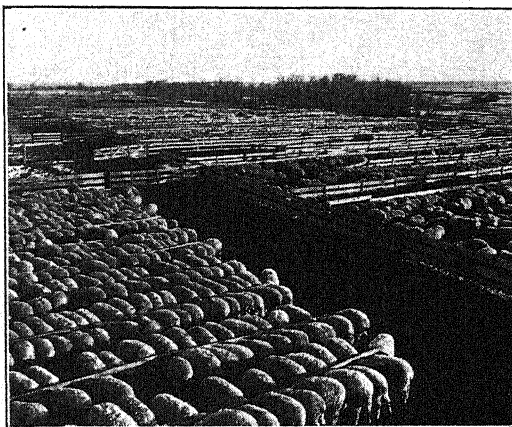
Introduction of Machinery Relatively Slow on Farms. Unfortunately most farmers do not make the most of power and labor-saving devices. Their failure to do so is caused largely by lack of education and lack of funds. Neither of these obstacles is likely to be removed to any great extent until the nonproductive aspects of the farm problem are partially solved. These aspects will be discussed in a later chapter on balancing agriculture and industry.

There are also sectional differences in mechanization of farms. In the West mechanization has been promoted by the level, fertile land, and by the fact that on the plains and prairies farms were occupied

in much larger units than in the East, where the small size of the original farms and the large loss of investment in buildings involved in consolidating farms into the larger units essential to mechanization have been important factors. Dairymen and poultrymen in the East can buy grain from the West more cheaply than they can raise it themselves even with the best machinery. In the cotton belt a successful cotton-picker may lead to rapid mechanization, especially where the plantation system of extensive operations is already in existence.¹²

IMPROVING THE BUSINESS SIDE OF FARMING

Growth of Need for Management. Before the coming of power and labor-saving machinery the life of the farmer in both Europe and America was very simple. His farm was a world in itself. He and his family consumed most of their produce. The main problem was to raise enough produce to support himself and his family and to have a surplus to exchange for such goods as coffee and sugar. With the coming of the Industrial Revolution, however, villages grew into cities and the demand for agricultural products increased and absorbed the small surplus which the farmer was able to produce. The tillable areas of Europe were drawn upon heavily and the great fertile areas of America came rapidly into cultivation.



Feeding lambs in Colorado. The scientific farmer chooses crops for feeding purposes which will also replenish his land. (Courtesy U. S. Dept. of Agr.)

In America, especially after the Civil War, agricultural production increased rapidly. At first little thought was given to the rotation of

¹² See *Recent Social Trends*, Vol. I, pp. 109-10.

crops or to the maintenance of soil fertility. Crops were raised which promised quickest returns. This "get-rich-quick" policy paid at first, but was not profitable in the long run, and much land in our Southern and Eastern states was worn out by the methods employed. So long as new areas of fertile country were available in the West, the nation had little need to think of improving farm management. At the close of the nineteenth century, however, the time came when the frontier had practically disappeared and no new areas like Kansas, Nebraska, and the Dakotas awaited the touch of the plow to add their products to the stream needed by the urban centers.

The farmer now had to analyze his production problems to see if he could secure a greater output. He needed to find which crops were best fitted for the types of soil on his farm, and which rotation systems would give the greatest returns. The choice of the crops to be raised depended to some extent upon the distance of the market and its demands. For example, it was unprofitable for a farmer to raise hay in a mountain valley on the western slopes of the Rockies and expect to market the hay in Omaha. Other conditions permitting, grain would furnish a more concentrated product for shipping. If hay had to be raised as a rotation crop, it could better be used to fatten cattle for the market.

New Need for Cost Accounting. Industrial changes have brought new problems to the farmer. As a business man his success is measured by his net profit. It is here that the need for a system of cost accounting becomes important. The system must be workable and so simple that it can be run by the farmer or some member of his family in spare time. Several simple systems have been developed that supply the farmer with just the essential facts about his business. Besides the cost account, he needs records of egg production, milk yields, and quantities and kinds of seeds used. With such information at hand the farmer can tell which of his operations are profitable and which are unprofitable. After having located the leaks, he can search intelligently for remedies.

Coöperation in Agriculture: Buying Supplies. Rural life can be greatly improved by teamwork among farmers, and farmers have begun to discover for themselves its value. In certain sections of the country they have formed associations for buying their supplies collectively. Sometimes the associations handle only the commodities that are used in large quantities, such as twine, sacks, fertilizers,

crates, and boxes. At other times they provide coöperative stores in which the members can secure anything from a reaper and binder to a package of pins or a pound of nails.

Coöperative Ownership of Tools and Factories. The coöperative ownership of expensive pieces of labor-saving machinery enables farmers to escape much of the hard work common to farm life. Many of the machines are costly and are used only for short periods during the year. By joining together, a group of farmers can buy such machines and share their use without heavy expense to any individual. In certain localities joint ownership has been pushed a step further to the coöperative ownership of creameries, cheese factories, cotton gins, and drying and canning factories. Farmers' coöperation has had an even more successful development in establishing marketing and storing facilities in such organizations as the Citrus Fruit Exchange and the Raisin and Prune Growers Associations of California.

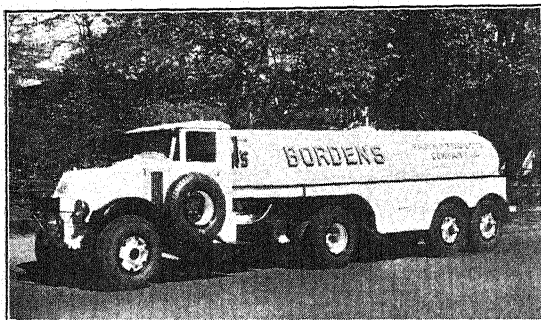
Coöperative Use of Services. In some communities the farmers have joined to hire the services of a veterinary. Few farmers can afford to pay for such services as individuals, but the combined fees are sufficient to employ a competent person. The health of farm animals presents much the same problem as the health of human beings. Preventive measures are always better than curative. The veterinary hired by the year can more easily act in an advisory and therefore preventive capacity. Many farmers have been slow to realize the importance of teamwork in solving their production problems. But the Grange, the Farm Bureau, and other organizations are now active in developing the coöperative spirit and in promoting associations among farmers.

IMPROVING MARKETING METHODS

Problems of Marketing. Of major importance in solving the agricultural problem is the disposition of the crops or, as it is usually termed, marketing. By *marketing* we do not mean securing a good price or a good market for commodities. That is a problem in itself, to be discussed later on. We mean motor trucks, paved roads, modern warehouses, and other improvements in the material facilities for transporting and storing farm products. Only a few decades ago the principal marketing activity of the American farmer consisted of an exchange of butter, eggs, cheese, smoked meat, and live ani-

mals with the country storekeeper for groceries, dry goods, and notions. With the growth of cities, however, came a separation of the country producer from the city worker that made necessary modern systems of transportation and exchange. The new industrial civilization has presented serious problems to both the farmer and the city consumer.

Local Transportation. The farmer's immediate transportation problem is the hauling of his products by team or motor truck to



Huge motor trucks, in addition to providing the best service for local transportation, are coming to compete with the railroads for long distance hauls. Particularly along the eastern seaboard, a traveller by night may see long chains of trucks moving at a fast pace. (Courtesy Borden's Farm Products Co.)

the local market. If the distance is great and the roads are good, the truck offers the best method. In isolated districts the development of hard roads is almost as important as the coming of the railroad was to the plains of the Middle West at an earlier time.

As a means of carrying produce to the market and supplies to the farm the motor truck is a relatively recent and only partially developed aid to the farmer. It offers the farmer a means of getting to distant markets and of returning to work with the least expenditure of time.

When we consider that on an average about 6 per cent of the value of crops goes to cover the cost of local and long-distance transportation service, the importance of improving transportation facilities becomes apparent. Reduction of local transportation costs depends upon the construction of good roads for all-year hauling, upon more rapid methods of getting to market, and upon greater hauling capacity of wagons or trucks. In many sections of the country groups of farmers have developed collection systems whereby one of the group or a truckman hired by the group daily or at regular intervals gathers the community products and takes them to the local market.

This is a great saving, as it eliminates the necessity for individuals to make many trips with partly filled trucks.

Long-Distance Transportation. The railroad remains the most important of all methods of transportation. Freight rates are a major item in farm costs. Perishable products must be transported quickly, and even nonperishable products must frequently reach the market on time in order to sell for a good price. Speed has been attained not so much by the use of faster locomotives as by through-routing preferences which, for a slight additional fee, hasten freight cars to the market. The part refrigeration plays has been noted.

Water Traffic. Water transportation, although much older than the railroad, is far less important today. But water transportation has advantages in regard to costs which must not be overlooked. Even today, Oregon and Washington apples are sent to New York around the coast and through the Panama Canal instead of directly across the continent by rail. The water routes of the United States, especially the Mississippi and its tributaries, might be more fully utilized than they are at present. The recent treaty between the United States and Canada, if it is ratified by Congress, will give the area tributary to the Great Lakes an outlet to the sea and enable vessels to receive cargo from points as far west as Duluth, Minnesota. Other projects of great interest for the future would be the establishing of a gulf-to-lake water route and the deepening of the channel of the Hudson so that ocean liners can reach Albany.

Storage Needs. In the marketing process storage is an important supplement to transportation. With many products storage is necessary not only on the farm, but also at the receiving station or along the route, for grading and reclassification. The need for storage begins with the farmer. He should be able to keep his wheat in steel or concrete granaries or even in wooden bins conveniently built, arranged if possible so that the grain can be handled at least one way by gravity. The need for storage continues with the elevators of the local buyer or miller at the railroad or with the coöperatively owned local elevator. To prevent flooding the markets at harvest time, especially in the case of wheat, and to avoid overtaking the transportation facilities both require adequate storage arrangements. Besides aiding the farmer to sell his grain on a more stable market, storage in a central place enables him to receive cash or credit for his product. This he cannot secure if he has stored the

grain in his own granaries. Much can also be done to prevent waste and cluttered markets in the handling and storage of such produce as apples, potatoes, and other vegetables. Again the storage problem starts on the farm with proper storage cellars or buildings.

Sorting, Packing, and Grading. Many farm products should be sorted, graded, and packed. Not only do the types of product differ, but even units of the same product vary in size and quality. For example, eggs must be sized and candled. Even so commonplace an article as the potato is shipped in three different grades. Tomato-grading is so highly specialized that bands of tomato-packers follow the crop up the coast and contract with the grower to pack it. With the more delicate fancy fruits, such as peaches or oranges, variety of classification becomes a fine art. Much higher prices can always be secured by separating the fully rounded fruits from the ordinary or stunted grades, and commission houses accept without question the stamp which a reputable shipper places on his barrel of potatoes or crate of lettuce to designate the grade.

Coöperative Storage, Grading, and Packing. It is an exceptional farmer who produces so large a quantity of any single product that he can market it direct. Most farmers raise perhaps two or three acres of potatoes, less than a carload of apples, and varying quantities of vegetables such as cabbage and carrots. A centralized agency is needed to receive products from different farmers, to sort and grade them, to package and to market them. With small producers the assembling and grading, especially of a single commodity, may be done by some individual or firm in a central location, such as the local grain elevator in a small town; or the work may be done by the producers themselves organized coöperatively for building a warehouse and hiring experts to take charge of the assembling, grading, and sale.

Study of Farm Conditions Necessary. The farmer can do much to bring about better marketing policies by studying marketing trends and by applying them to his own problems. He now has many opportunities to receive market information from day to day, such as the market reports sent out by the Government and the daily market quotations broadcast by the radio. The Department of Agriculture and various state agricultural colleges also help the farmer to understand the trends of production in this country, and to guide his efforts into the most profitable channels.

EROSION OF THE SOIL

Immense Evil of Soil Erosion. Already, even in our relatively young country, vast areas of farm land have been lost through soil erosion. Carl Sandburg, in his life of Lincoln, gives an example which occurred in the Indiana boyhood of his hero:

It wouldn't be easy to forget that Saturday afternoon in corn-planting time when other boys dropped the seed-corn into all the rows in the big seven-acre field—and Abe dropped the pumpkin-seed. He dropped two seeds at every other hill and every other row. The next Sunday morning there came a big rain in the hills; it didn't rain a drop in the valley, but the water came down the gorges and slides, and washed ground, corn, pumpkin seeds, and all clear off the field.

Prevention of further losses from erosion would be the greatest single means of aiding agriculture, and perhaps the greatest possible contribution to national welfare.

Because soil erosion is a long-run problem, it has received little attention. H. H. Bennett points out some of the evils it brings:¹³

When the surface soil is washed off, clay usually takes its place. This exposed sub-soil which the farmer must now cultivate or abandon, is more difficult to plow, is less absorptive of rainfall, and loses that which is absorbed faster than the more spongelike humus layer now gone. The plant food in the raw sub-material is in less available form, and the farmer accordingly must use fertilizers or grow soil-improving crops in order to maintain his yields. Rainwater runs off the exposed impervious clay faster than formerly to increase the height and frequency of floods. . . .

In a single country of the southern Piedmont 90,000 acres of formerly cultivated land have been mapped as *rough gullied land* without value for cultivated crops. Once rated as good soil, this gullied area is permanently destroyed. It can not be restored to arability, though it could have been saved.

Probably not less than 17,500,000 acres of formerly cultivated land have been destroyed or rendered practically useless in this country because of gullying.

Bad as it is, it is not gully erosion that is doing greatest damage to our lands. Sheet erosion, that slower process of land washing which takes place

¹³ "The Increased Cost of Erosion," *Annals of the American Academy of Political and Social Science*, Vol. CXLII (March, 1929), pp. 170 *et seq.*

more or less equally over the surface of entire fields, is the principal agent of land impairment. Its activities affect many times the area damaged by gully-ing. It goes on wherever there is enough slope for rainwater to run downhill, even in desert country where the precipitation is only three or four inches. On a 2 per cent slope in western Texas 40 tons of soil were removed from one



The devastating effects of a bad case of gullying. Thousands of eastern farms have been thus deteriorated. (Photo by W. R. Mattoon. Courtesy U. S. Forest Service.)

acre with 27 inches of rainfall. Since fully 75 per cent of the cultivated lands of the nation are this steep or steeper, it can be seen that the possibilities of soil wastage are vast. While the washing will not proceed this rapidly on all soils, it will be serious, nevertheless, over most unprotected slopes. At the Missouri Experiment Station 40 tons of soil per acre were lost per year on a 6 per cent slope, and in North Carolina 25 tons an acre in the same time.

A single rainy period probably did more damage to thousands of fields in the region of silty soils of the Missouri River country above Kansas City during the fall of 1927 than could be corrected by a decade of crop rotations. More than 40 tons of soil were lost per acre from many fields of this region by sheet erosion during this one rainy season. . . .

Already land is going out of cultivation in this region, which once consisted of some of the best upland soil of the United States. In a valley near the Missouri River a survey showed that 86 per cent of the upland area had lost from 8 to 40 inches of soil since clearing 40 years ago. Much of this is now so poor it has been abandoned to weeds. Even apple trees are dying on the eroded slopes. . . .

Exceedingly severe erosion and water losses also follow the burning off of the vegetation. Harding Reservoir in Orange County, California, is said to have been completely filled with debris as the result of a single rain that fell upon the watershed where a fire had destroyed the bush growth.

In a thickly populated district of the Southwest, costly concrete dams are being constructed as a means of flood control. The watershed above one of these was entirely burned over recently by a fire started from a lighted cigarette carelessly tossed among the bushes during the dry season. One heavy rainfall following this washed in enough soil, gravel, and stones to take up 10 per cent of the storage capacity created by the expensive dam. . . .

Land impairment by erosion in the West, particularly in the great southwestern grazing region, has been no less destructive than in the central and eastern States. Where there was good grass and herbaceous growth when the country was opened to grazing there is now, in numerous localities, very little forage. This is due to overgrazing and consequent removal of much of the soil by erosion following excessive diminution or destruction of the vegetation. As the result of this range depletion the number of live stock that can be carried has been greatly reduced for numerous areas. This is taking place extensively, not only on the 196 million acres of unappropriated, unreserved and unregulated Public Domain, but on privately owned ranges and many of the Indian reservations. One sees and hears of "grazed-out" or "sheeped-out" areas all through this vast southwest country, under precisely the same conditions where, with proper regulation, the national forests have maintained excellent range conditions. . . .

Rough estimates, the only kind that can be made in the present absence of accurate measurements, indicate that not less than 125 million acres of our farm land have been severely damaged by erosion, much of this having lost from 3 to 20 inches of soil from the surface.

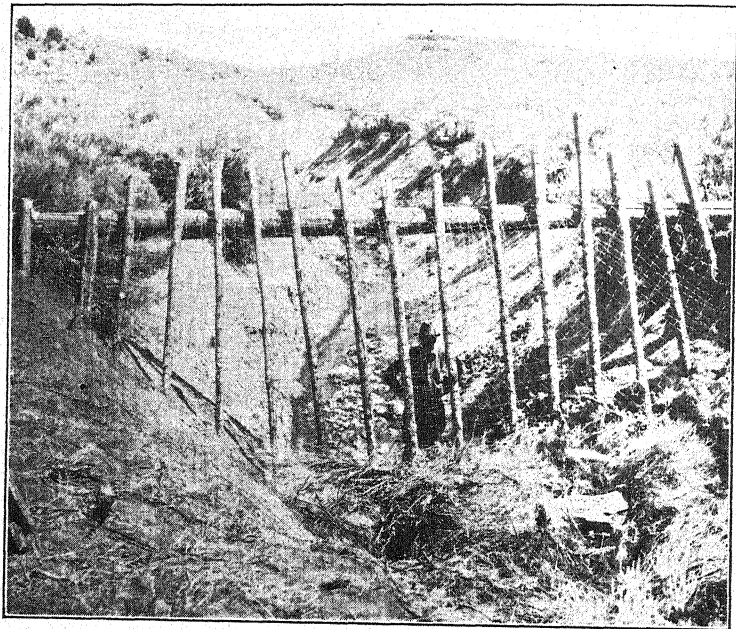
Remedies for Soil Erosion. Faced with such loss of soil by erosion what can we do about it? Bennett offers these suggestions:

At the present time numerous areas, large and small, are being cultivated throughout our farming regions, which are entirely too steep and erosive for safe tillage, even with the best protective measures that we know. These, of course, should be used only for trees or permanent pasture. In a little while it will be impossible to use them for any other purpose, as they will automatically pass beyond possibility of cultivation. In parts of the Appalachians steeply sloping ground is still being cleared for cropping where the farmers know that it will wash to bedrock within three or four years.

On the other hand, vast areas of eroding lands are in cultivation which could be given efficient protection with cheaply constructed field terraces, or contour embankments. This implement of soil conservation is being extensively

used in parts of the Southern States. In 1927, 494,000 acres were terraced in Texas alone, and a drive is on to largely increase the yearly program. The farmers there have seen what terracing means in saving fertile soil and in storing moisture in the ground for subsequent crop use. . . .

Grazing must be regulated on the ranges and in the pastures. Trees and grass must be resorted to in order to save the steeper slopes. Certain vines,



Woven wires placed across gullies collect drift and soil and reduce the force of the flow. (Courtesy U. S. Dept. of Agr.)

grasses, and trees will be needed to hold some eroding areas. Even chemicals may be needed in some instances. And there is need for devising better terracing implements. . . .

The task of putting chains on the evils of soil erosion on a large scale is going to be a very difficult one. It is going to tax our best efforts, even with widespread coöperation of soil scientists, engineers, practical agriculturists, the extension agencies of the nation, bankers, merchants, and railroads. Delay will only accentuate the difficulties because erosion gathers momentum as the surface soil is removed.

Where Control of Erosion Is Most Important. Although erosion does not threaten the country as a whole with shortage of food or fibers, its control is vitally important in those areas where it is most severe. In these places it has brought about abject poverty.

Although terracing will retain erosion where it is practiced, it appears that the hilly and rolling lands of the South and Southwest and parts of the North Central States also, are going the way of similar lands in southern China.¹⁴

IMPROVING RURAL WORK

Human Work as a Productive Problem. No matter how much machinery there may be on the farm, the farmers, with their women and children, are the great sources of production. Long-range gains in efficiency must decrease the wear and tear upon the bodies and minds of the farm family. Otherwise the machines destroy more than they create.

Improvements in Farm Work. Improvements in farm work have affected both men and women. Men have far less of the heavy, mucking work common fifty years ago and much more work that requires mechanical cleverness and other than mere physical abilities. No longer is it necessary to swing a scythe throughout the long days of the harvest and haying seasons. Much of the burden of preparing the soil and cultivating the crop can now be placed upon the horse or upon the tractor. Wood can now be sawed with the aid of power machinery. Many other appliances about the barns and stables save labor and relieve the strains which were borne by the old-fashioned farmer.

An equal number of devices within the home make housework easier than it used to be. The making of clothes, the preparing of food, and such tasks as cleaning are lightened by the washing machine, the electric iron, running water, and electricity and gas for cooking, lighting, and heating. The preparation of bread, soap, canned foods, and clothing, all of which had to be done in the kitchens of the farm home, have now been taken over in large measure by the factory. Women are escaping the heavier duties of farm life and have more time for forethought and planning.

¹⁴ *Recent Social Trends*, Vol. I, p. 98.

Need for Further Improvements. But great need for improvement yet remains. Many tasks which machines will take over in a not distant future are still performed by the hard labor of women; and many farm homes are not equipped with the labor-saving devices mentioned above. All farms need to be made like the best of them. Hours of labor are still heavy on many farms. A government bureau recently found that $63\frac{1}{2}$ hours a week was the average "working time" for 700 farm women who kept records of their time. The weekly average for strictly "home-making" activities was 52 hours and 17 minutes; the remaining 11 hours and 13 minutes were devoted to dairying, care of poultry, gardening, and similar tasks. The typical division of time (represented in this study by a New York group) was as follows: feeding the family, 25 hours, 51 minutes; other housework, 2 hours, 17 minutes; laundering, sewing, mending, and care of the children, together with outside activities, took up the rest of the week.

SUMMARY

The basic conditions for agricultural success are fertile land, suitable climate, favorable location, and optimum farm size. In all these respects the United States is well situated. Progress has taken place in crop rotation and in stock and seed breeding, but much remains to be done. Although reasonable headway has also been made against adverse climate, pests, and diseases, they still remain a constant menace.

The chief means of increasing farm production is the mechanization of agriculture, and most of the progress in farm production since the Civil War has been brought about by the greater use of machinery. But agriculture still lags far behind industry. While large farms have used efficient devices, the majority of farmers have remained backward. This is due to ignorance, to poverty, and to sectional handicaps. Of almost equal importance with agricultural mechanization is the introduction of business principles into small-scale farming. The farmer must study his soil, his equipment, and the demands of the market; and he must keep accurate accounts. Frequently the poor farmer can improve his facilities by coöperation in buying goods and services, and by the joint use of machines and factories. The best means of transportation must be made available for marketing; and

modern methods of storage, grading, and packing must be taken advantage of. Soil erosion, the greatest menace to agriculture, may be checked by adequate precautionary and remedial measures. The improvement of the human side of rural work by the application of labor-saving devices is also a vital part of the agrarian production problem.

QUESTIONS AND PROBLEMS

1. On an outline map of the United States shade the regions that are not well suited for agriculture because of (a) lack of fertile soil, (b) distance from markets, (c) unfavorable climate, (d) ignorance of scientific farming. Which of the four conditions mentioned impresses you as most serious? Give reasons.
2. Which of the conditions named in No. 1 can be most easily remedied? Suggest ways by which the remedies can be brought about.
3. How does the size of a farm affect success in agriculture? Can a farmer have too much land for his own welfare? Can he have too little? Explain.
4. Why does nearness to a city often determine the character of agriculture? Illustrate by what you have noticed in the country as you approached a large urban community.
5. Do people who live in the country or those who live in the city talk more about the weather? Why? Can you give any evidence for your opinion?
6. The early pioneers thought that a region was crowded if the population numbered more than ten or twelve to the square mile; today several times that number live comfortably within that area in the same region. Account for the change that has taken place.
7. Explain the meaning of rotation of crops. How does the practice affect farming? Give examples of rotation of crops found in your part of the country.
8. What is meant by scientific breeding? Mention ways in which it has improved agriculture. Is scientific breeding followed in your vicinity?
9. Can anything be done to overcome the hazards of farming caused by bad weather? Explain.
10. Some scientists say that man's most dangerous foes are insects. Give reasons for their opinion. Mention methods that are used by man to combat the insect peril.
11. Why is the period since the Civil War often called the age of machine agriculture? List machines now used on well-managed farms but unknown a century ago.
12. Why is machinery much more common on large farms than on small ones? In certain sections of the United States than in others?

13. Point out the advantages a tractor has over a team of horses. Does it have any disadvantages as compared with the horses? Explain.
14. What is meant by the *management* of a farm? Illustrate. Mention ways in which improvement in farm management is most needed. Be specific.
15. Mention ways in which coöperation among farmers would prove advantageous to them. Tell about a rural neighborhood in which the farmers coöperate successfully. Why is it often hard to develop teamwork in a rural neighborhood?
16. List the main difficulties involved in marketing farm products. Suggest ways to overcome each difficulty.
17. What does the national Government do to help the farmer increase his production? Suggest other ways it might aid him.
18. What is soil erosion? If possible bring pictures to class that illustrate its effects. Why is soil erosion a menace to the country? How can it be prevented?
19. Contrast the kinds of work done (a) by men and (b) by women on an up-to-date farm today with the kinds of work done on most farms fifty years ago. Mention improvements that are still needed in the kinds of work done on many farms. Illustrate, if possible, by what you yourself have seen of farm work or experienced in it.
20. Compare the hours of work on a well-managed farm as they are today with the working hours on a typical farm half a century ago. Explain the main causes that have brought about the change. How are the working-hours ordinarily distributed during a day, that is, how long do each of the various tasks generally require? Apply the foregoing questions to each of these types of farms: (a) diversified; (b) specialized. Give examples in each instance.
21. Why is the problem of increasing farm production one of the most important of all farm problems? How does it relate to the problem of raising the levels of living?
22. Why does national prosperity depend on agriculture?

READINGS IN THE CLASS LIBRARY

1. "Agriculture and the New Machines," Forman, *Sidelights on Our Social and Economic History*, pp. 83-86.
2. "The Greatest Wheat Farm in the World," Stuart Mackenzie, *ibid.*, pp. 100-04.
3. "Reclamation and Conservation," Harold Howland, Hart, *Twentieth Century United States*, pp. 307-11.
4. "Water on Arid Lands," F. H. Newell, *ibid.*, pp. 312-17.
5. "Scientific Farming," Eugene Davenport, *ibid.*, pp. 317-21.

6. "Agricultural Extension Work," H. W. Hochbaum, *ibid.*, pp. 323-27.
7. "The New Economics of Farming," F. O. Lowden, *ibid.*, pp. 325-40.
8. "The Pink Invader," V. H. Schoffelmayer, *ibid.*, pp. 340-46.
9. "The Need for Conserving Our Forests," Theodore Roosevelt, Hill, *Readings in Vocational Life*, pp. 57-58.
10. "Reclaiming Waste Lands," *ibid.*, pp. 68-69.
11. "Farm Coöperative Associations," R. F. Couch, *ibid.*, p. 134.
12. "Good Roads and the Rural Community," Macy Campbell, *ibid.*, pp. 193-96.
13. "Farming with Machinery," H. W. Quaintance, *ibid.*, pp. 302-03.
14. "Workers in Agriculture," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 608-13.
15. "Progress in Agriculture," *ibid.*, pp. 613-27.
16. "Farming in Bowman County, North Dakota," Weld and Tostlebe, *A Case Book for Economics*, pp. 99-101.
17. "Irrigation in the Sacramento Valley," S. H. Beckett and R. D. Robertson, *ibid.*, pp. 102-07.
18. "The Wheat Pit," Frank Norris, Center, *The Worker and His Work*, pp. 96-107.



Chapter 10

THE IMPORTANCE OF FUEL AND MACHINERY IN INDUSTRY

HUMAN PROGRESS AND PHYSICAL SCIENCE

Primitive Man. If we could by magic turn time back and see the early struggles of primitive man, we might perhaps find him delighted over the discovery that by the use of a pole as a lever he could roll a rock to the mouth of his cave and thus protect his few supplies while he was away hunting. Or we might find him equally delighted over the discovery that a section of a round log placed under a heavy object helped him greatly in moving it. Out of this latter experience the wheel slowly developed. Not until primitive man had had some success in such inventions was he really on the road to solving the problem of securing more food, more clothes, and better places in which to live.

Many centuries separate the simple use of the lever, the wheel, and the inclined plane by primitive man and the development of the present age of machinery. Industry, which in a sense is merely the multiplication of tools, slowly assumed an important place in the world of work. Laborers gradually turned in ever increasing numbers from herding and sowing to mining, forging, and weaving. While kings and prime ministers busied themselves with wars and intrigues, artisans combined and recombined wheels, rollers, pulleys, and belts and bit by bit brought about the Industrial Revolution. Levers, inclined planes, and wheels ultimately changed into the steam engine, the power loom, and the printing press.

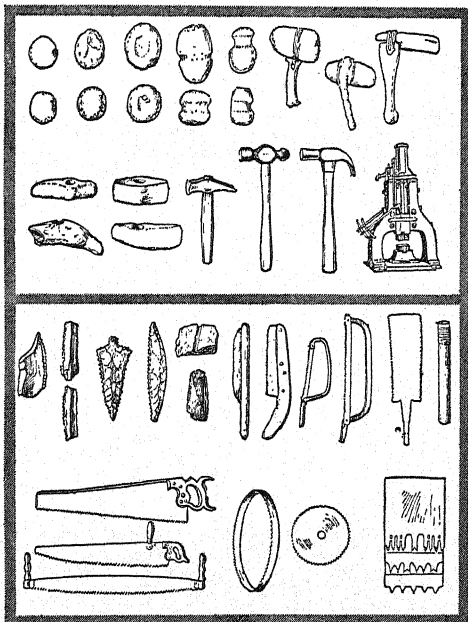
Early Use of Animal Power. At first man was forced to rely on his own muscles to supply the power for the devices which he invented. But the same inventive urge prompted him to find outside

sources of power to supplement his own energy. It was but natural that he should harness the animal which he had domesticated and which hitherto had supplied him with meat or leather, or perhaps had been used for transporting light loads or pulling crude plows. In time by means of tread-mills and sweeps, he employed the horse, the goat, and even the dog to furnish the power to pump water on to the field, to crush sugar cane, or to grind grain.

Utilizing the Forces of Nature. But such victories did not satisfy man's inventive faculties. He had discovered that a sail attached to a boat would relieve him from much of the tiresome labor of rowing or paddling. Why, he asked himself, could not the wind be harnessed to his pump and mill in place of his horse or ox? Accordingly he fastened sails to extended arms so that the wind caused them to revolve—and the ancestor of the modern windmill was complete. It was only

a short step from the use of wind power to the harnessing of falling water, and as a result man now had sources of power at his command which were not only capable of running his machines much faster than the animals could, but which were also able to pump more water and grind more grain.

Fire and Fuel. Valuable as the new power sources were, they had distinct limitations. The wind might not blow for days; consequently the pumps would be idle and the fields become parched.

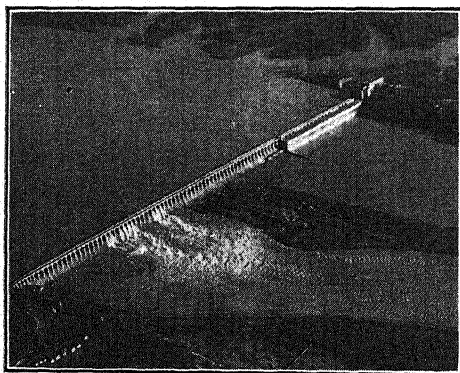


The evolution of the modern hammer and saw. A graphic example of the painfully slow process through uncounted centuries, whereby mankind fought its way from savagery to civilization. (Courtesy Popular Mechanics Publishing Co.)

The stream might dry up or it might be located far from the place where its services were most needed. The solution of such power problems came through the harnessing of another force with which man had long been familiar—fire. He had used fire to warm his house and cook his food; he had also employed it in smelting and working metals; now he began to utilize it to supplement the energy of animal, wind, and water power. With coal as the source of fuel and the steam engine to transform the energy of heat into power for mill or mine, industry was freed in large part from the whims of the wind and the uncertainties of water. Man no longer needed to build his factory near the waterfall.

POWER AND ITS POSSIBILITIES

Sources of Power. A survey of power sources in the world today reveals three general classes: (1) inexhaustible energy—the sun, the



winds and flowing waters, radium, the heat of the earth; (2) the energy of fuels and metals—mining resources and the like; (3) the muscular power of animals and men.

The Wilson Dam at Muscle Shoals. This stupendous power project has been supplemented in 1933 by legislation for the further development of government-owned power resources. (Courtesy of U. S. Army Air Corps.)

The Sun as a Source of Energy. The principal source of all energy is the sun. Food for man and beast depends largely upon it. Coal and petroleum deposits are the stored-up sun energy of past ages. The sun's rays lift up into the upper atmosphere enormous

quantities of water that later are deposited in the form of rain or snow in valleys and on hills and mountain peaks. The water flows again toward the sea and in so doing furnishes the energy to operate countless water wheels. Even though the sun is the fundamental source of energy, efforts to utilize directly the energy of the sun's

rays have not met with success. Experiments with solar motors show the low-grade character of such resources. . .

Water Power. In the United States the use of water power was facilitated by the passage in 1920 of the Federal Water Power Act, which opened water-power sites to development under federal license. The superpower movement has now expanded the market for water power.

Formerly the market for hydro was limited to the requirements in the vicinity of the site unless the promoters constructed their own transmission lines to distant markets. . . . The use of interconnected electrical systems provided a much larger and more diversified market; it brought the market nearer to the water power, thereby cutting down investments in transmission lines; and it reduced or eliminated the need of auxiliary steam plants. . . . The result is a rapid increase in the installed capacity of water power. The completion of Hoover Dam will add another 1,200,000 horse power to the total development.¹

TABLE 24

GROWTH OF DEVELOPED WATER POWER IN THE UNITED STATES, 1869-1930 ²

<i>End of Year</i>	<i>Capacity of Water Wheels, Horse Power</i>	<i>Average Annual Increase over Preceding Date</i>
1869	5,150,000	.....
1879	1,250,000	10,000
1889	1,300,000	5,000
1902	2,050,000	58,000
1910	4,220,000	271,000
1915	6,140,000	384,000
1920	7,800,000	332,000
1925	11,180,000	676,000
1930	14,885,000	742,000

Water Power still Undeveloped. The 14,885,000 horse power used up to the end of 1930 may be compared with the total potential of 38,000,000 horse power, as estimated by the United States Geological Survey. Thus less than 40 per cent of such power has been developed. While water power furnishes 40 per cent of the electricity generated by the public utilities, it supplies only 7 per cent of the total energy consumed, including energy used in the form of heat.³

¹ *Recent Social Trends*, Vol. I, p. 72.

² *Ibid.*, p. 73.

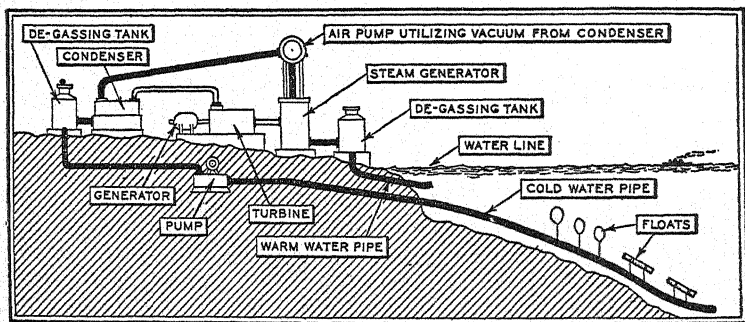
³ *Ibid.*

Other Inexhaustible Sources of Energy. The use of the tides as a source of energy lies largely in the future, although an 80,000-horsepower project is now before the Federal Power Commission (1933). The most successful tide power-plants take advantage of the rising tide to store water in tanks or basins from which it is allowed to fall upon water wheels or turbines.

For a decade physicists have predicted that the use of radium will open new possibilities of power. Others profess to see limitless stores of energy locked up within the atom. But Robert A. Millikan says:

The energy available . . . through the *disintegration* of radioactive, or any other, atoms may perhaps be sufficient to keep the corner peanut and popcorn man going, on a few street corners in our larger towns, for a long time to come, but that is all. . . . A billion years hence he [man] will, I think, be supplying all his needs for light, and warmth, and power entirely from the sun.⁴

External evidences such as geysers, volcanoes, and hot springs indicate that below the earth's crust are regions of extreme heat.



This diagram represents the plan of an eminent French scientist for generating energy by utilizing the variations in temperature between upper and lower levels of sea water. He contends that a power-plant can be built which would boil 35,300 cubic feet of sea water every second, generating 300,000 horse power. (From *The New York Times*, October 12, 1930.)

The high temperatures in the deep shafts of the Utah and Montana copper mines provide further evidence that such conditions of heat exist. Here is another great source of energy if a practical method of transforming the heat into usable power can be worked out. In California an interesting project utilizing the heat of the earth is

⁴ R. A. Millikan, "Available Energy," *Science*, Vol. LXVIII, Sept. 28, 1928, p. 284.

already well developed. The particular region is dotted with numerous small geysers emitting mostly steam. Engineers have put down several borings, obtaining steam under sufficient pressure to run engines. Many plans like this are found in different parts of the country; and natural power-houses may develop from some of them.

Like the use of tidal and solar power, however, extensive utilization of the heat of the earth will have to wait until the more easily available resources of energy are used up. So long as low-grade energy resources exist in enormous quantities, any techniques now known for developing the "inexhaustible" sources are far too costly. The wind as a source of power has been put to but little use, and the use of windmills is declining rapidly in this country.

Dependence on Fuels and Mineral Resources.⁵ American economic progress has been attended by a rapid consumption of earth materials. During the twenty years ending in 1929, such consumption was greater than during the preceding three hundred years. At present fuel provides approximately three times as much power as does water. Metals furnish the basic materials for construction and machinery. In the mineral fuels, in iron and other metals, our per capita consumption is far higher than that of the United Kingdom, two or three times that of France and Germany, and five or ten times that of Italy and Spain.⁶

Growth of Mining. The growth of mining, which has furnished the sinews of power and metal necessary for other industries, has been faster than the growth of either agriculture or manufacturing, as the following table shows.

TABLE 25

GROWTH OF PRODUCTION FROM 1899 TO 1929⁷

<i>Item</i>	<i>Index 1899</i>	<i>Index 1929</i>
Population	100	162
Physical volume of production:		
Agriculture	100	148
Manufactures	100	310
Transportation, railroad ton miles	100	338
Mining	100	386

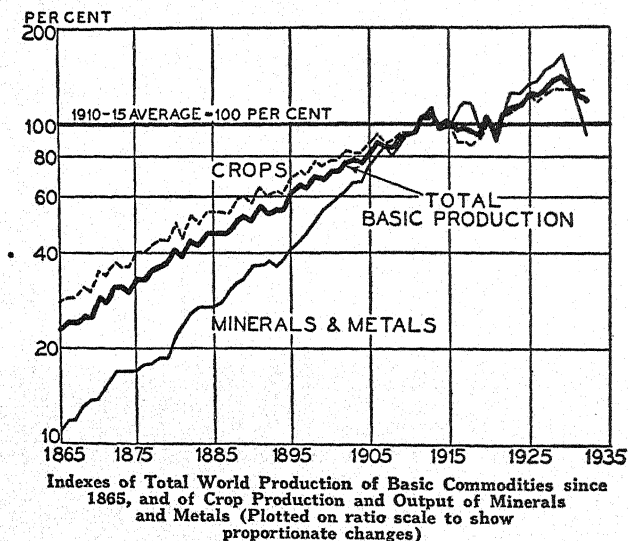
⁵ For the ensuing discussion of mining, we have drawn heavily upon *Recent Social Trends*, Vol. I, Chapter II.

⁶ *Ibid.*, p. 60.

⁷ *Ibid.*, p. 61.

There are definite signs, however, of a reduction in the swift progress of recent years. These signs appeared quite apart from the depression starting in 1929, which of course reduced all economic activity 25 to 50 per cent. Production of certain minerals, notably oil, gas, and sulphur, has increased rapidly, but that of others, such as anthracite, gold, and silver, shows an absolute decline. Still others, although production is increasing, show definite retardation; examples are bituminous coal and virgin pig-iron.

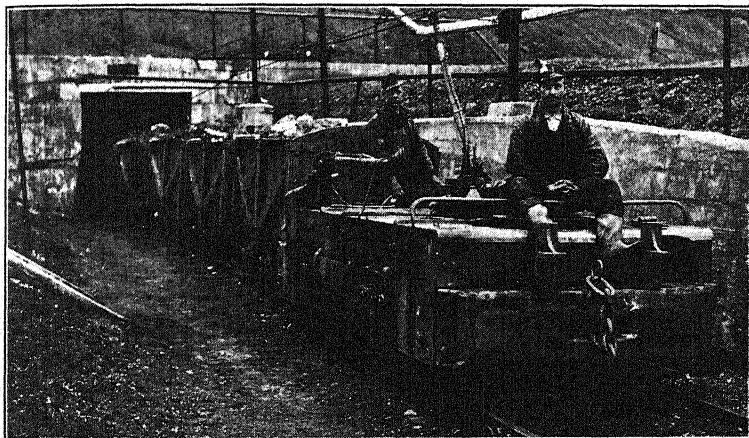
The decline in exportable surplus is one test of the aging of an industry. Speaking broadly, we still have a large surplus of mineral



(From *Monthly Review*, Federal Reserve Bank, N. Y., May 1, 1933.)

products. There has been little change so far as bituminous coal, lead, iron, and zinc are concerned. The same is true of the minerals in which we are poor and which we continue to import in large amounts: tin, nickel, asbestos, antimony, platinum, and chromite. We have actually improved our position in sulphur, magnesite, nitrates, potash, salt, and asphalt. But in some of our largest and most important basic mineral industries—anthracite, copper, and petroleum—we have lost ground, although we still have an exportable surplus.

Overcoming the Growing Difficulties of Mining. The problem of conserving mineral resources is not one of absolute exhaustion, but rather one of avoiding increased costs of production. In mining the richer and more accessible deposits are usually exploited first, and the poorer regions are used later. During the past century the discovery of rich deposits kept costs down, but today we cannot count on many



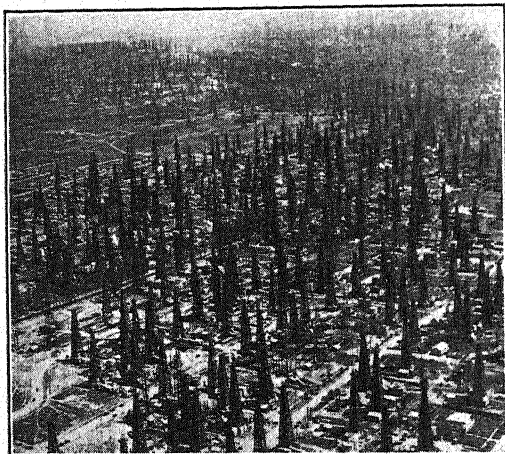
Electric locomotives bring the materials from the mined area to the surface. The coal is separated from the waste in the open air with the aid of machinery. (Courtesy Philadelphia and Reading Coal and Iron Co.)

more such discoveries. We must increasingly rely on advances in mining technology and on technical advances in consumption.

Mechanization has been rapid in mining. The electric locomotive and other electrical devices have displaced the use of steam and compressed air in coal mines. The cutting machine has supplanted the old-fashioned hand methods whereby miners undercut the seam. The back-breaking task of shoveling and lifting has been taken over by loading machines to such an extent that tonnage mechanically loaded rose from 1,880,000 tons in 1923 to 47,000,000 in 1930. Open-pit mining on the surface has undergone a similar transformation.

In the past the individual miners underground had to separate the valuable ore from the waste by a tedious picking process. Today mass methods are used, whereby all the material in the mineralized area is removed speedily. This is possible because of the recent development

in processes of separating the valuable materials from the dross. In metal-mining the change has been revolutionary. An ingenious process now separates the metal from the dross with uncanny precision and



A fairly typical view of competitive drilling in the Signal Hill field near Los Angeles. A few wells would have drawn all the oil that hundreds of wells have been provided to reach. Some idea of the waste involved can be had by reflecting on the investment represented by each drilling. (From Spence, Ewing Galloway, N. Y.)

permits the treatment of ores previously considered too lean for profitable operation. Similar achievements have occurred in the technology of other minerals, especially oils and gases.

Great gains have also been made in the fight against mounting costs. Production per worker has increased in all important mining operations except anthracite mining, greatly reducing costs. Another sign of success is a reduction in the

prices of most metals and fuels. This is reflected in the lower cost of power and heat. Electricity in particular has fallen in price with reference to other goods.

Technical Advances in Consumption. Second in importance only to advances in production has been the increasing efficiency in the use of fuel. It is now estimated that during the years 1909-29 the average consumption of energy per unit of product was reduced 33 per cent for all industries and railroads.⁸ Fuel efficiency has advanced more rapidly during the last twenty years than in any like period since that which immediately followed Watt's improvement of the steam engine.

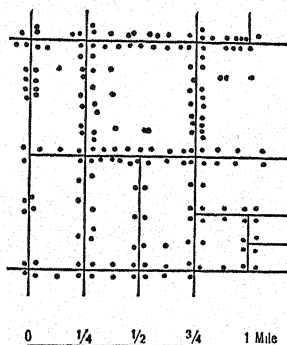
Competitive Mining Wastes Mineral Resources. The extremely competitive character of the mining industry leads to abnormal waste, by tending to cause the too hasty use of our mineral resources. In

⁸ *Ibid.*, p. 71.

bituminous-coal mining in the East, the average loss of coal in the mines is 35 per cent, of which 20 per cent is avoidable under known practices in mining. In the Middle West the loss is from 37 to 53 per cent. Every year 150,000,000 tons of minable coal are left underground in a condition which renders recovery unlikely.⁹ Similar conditions exist in other industries than coal, notably in oil.

Production Control. The conclusion reached by many authorities is that *production control* is essential in mining. Committees for studying the problem have been organized by the American Institute of Mining Engineers, the Chamber of Commerce of the United States, the American Petroleum Institute, and the National Coal Association. But the problem remains unsolved. Technological improvements and our great natural wealth insure safety against mounting costs for the immediate future. Over a longer period of time, however, it will be necessary to intensify technical research and in particular to improve the economic organization of production.

Animals and Men as a Source of Power. The last great source of power is to be found in living creatures. Animals play a rapidly declining rôle in agriculture and industry today, and there is no necessity to discuss their part. Men, on the other hand, are so important that we shall consider their position in the succeeding chapter.



Competitive oil well drilling. In the typical field with small holdings, a successful well on one property is immediately matched with one on another property. The result is to make many wells do the work of a few. The diagram shows how drillings are made in pairs close to property lines. (From *Bulletin 658*, U. S. Geological Survey, 1917.)

GOVERNMENTAL DEVELOPMENT OF NATURAL RESOURCES AND POWER PROJECTS

Tennessee Valley Authority Act of 1933. In 1933 Congress passed the Tennessee Valley Authority Act for the development of flood-control and power projects in the Tennessee Valley, including Muscle Shoals. The act authorizes the following federal activities:

⁹ Figures from *ibid.*, p. 86.

1. Construction of dams, reservoirs, transmission lines, power-houses, and navigation projects at any point along the Tennessee River
2. Manufacture of fertilizers and chemicals at Muscle Shoals
3. Operation of experimental stations and laboratory plants, and coöperation with state and local agencies in scientific inquiry
4. Study of the domestic and agricultural utilization of electricity
5. Reforestation of all the land in the drainage basin

In the sale of surplus power, preference will be given to states, municipalities, and other nonprofit public bodies. Transmission lines will be built to connect with outside lines, and to serve small villages and farms which are isolated today. Contracts of sale and transmission may be made with private enterprises. These contracts will be subject to cancellation if the prices charged by the private enterprise do not comply with the reasonable rates prescribed by the Government, or if there is an increasing demand by public bodies for direct services.

Reforestation. Another public-works act passed in 1933 came partly in response to the need for creating employment. The President was authorized, for a period of two years, to utilize jobless men for the following projects upon the public domain, both national and state:

1. Reforestation of lands suited for timber production
2. Prevention of forest fires, floods, and soil erosion
3. Plant-pest and disease control
4. Trails and fire lanes in public parks and national forests

THE MACHINE AGE

Mechanisms for the Application of Power. All the power resources of the world would be of little value without mechanisms to transform the energy into useful work. Water tumbled down from hills and mountain peaks long before man devised the water wheel and harnessed it to the mill. How man has utilized motive power in varying forms and has invented tools and machines to increase the quantity and variety of products to enrich his life would be a story far too extensive for our purposes. Here we can touch upon only a few of the outstanding mechanisms and processes used to provide for human wants.

Of greatest importance in such a survey are the mechanisms which directly transform energy into work. These mechanisms are called

motors. In a general sense these would include men, horses, and other animals, since they are capable of transforming food energy into work. Here, however, we will limit our attention to the chief kinds of mechanical motors, namely, (1) pressure engines such as water wheels, water motors, and windmills, (2) heat engines (including steam, gas, oil, hot-air, and solar engines), and (3) electric motors.

Pressure Engines. The oldest pressure mechanisms, the water wheel and the windmill, have undergone little change since they were first devised. This is especially true of the windmill, the only important development since its origin being the use of metal instead of wood as the construction material. The water wheel, however, was greatly improved by the invention of the water turbine.

Heat Engines. Most of our industrial power at present is developed by fuel-power motors utilizing coal, petroleum, or gas. Such motors are of two general types: (1) those deriving their power from motion imparted to a piston, like the steam engine and internal-combustion engine; and (2) those which depend upon turning the blades of a wheel, like the steam turbine.

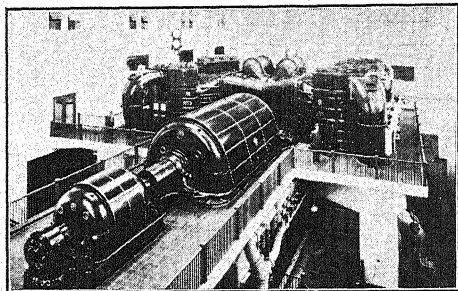
Improvements in the use of steam as a motive force have centered chiefly in efforts to increase the efficiency of the piston engine. The steam engine is known for its lack of efficiency in obtaining the largest amount of power from a given amount of fuel, few plants at present being capable of utilizing more than 20 per cent of the coal energy consumed. A host of devices have been developed to reduce this weakness of the piston engine, such as improved types of boilers, water heaters, and automatic stokers, but the waste still continues.

Engines using gas, oil, or gasoline are usually spoken of as internal-combustion engines. The fuel, which must be in gaseous form as it enters the engine cylinder, is mixed with air in the proper proportions to form an explosive mixture. It is then compressed and ignited within the cylinder of the engine. The pressure resulting from the explosion forces the movable piston into motion, thus transforming the energy of the fuel into work.

The internal-combustion engine has played an important part in recent industrial development. The tremendous growth of the automobile industry is in large part due to the invention and refinement of this type of motor. The main advantage of the internal-combustion engine over the steam engine is the availability of the former in smaller units. In industries in which the needed power can be supplied

with a power unit of less than 100 horse power the gas engine offers the best type of motor.

The reciprocating motion of the piston in an ordinary engine has certain drawbacks. The object of most steam engines is to deliver



This is a 94,000 kilowatt Tandem-Compound Turbine Generator operated at Long Beach, California. The advance that this giant evinces over the primitive wheel is no greater than the progress which may be expected in the future through the inventive genius of man. (Courtesy General Electric Co.)

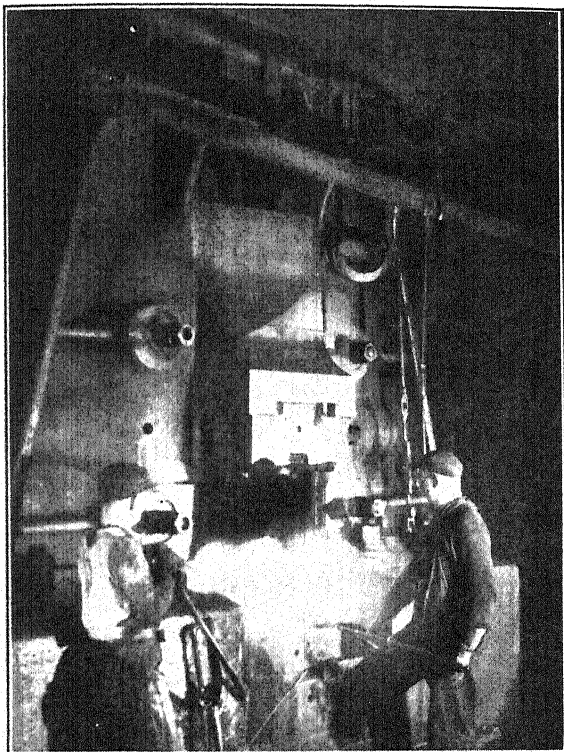
power to revolving machinery, and much thought has been devoted to means whereby rotation may be produced directly, rather than by the conversion of reciprocating motion. But no rotary engine was really successful until the invention of the steam turbine.

In the turbine (both water and steam) the force to do useful work is obtained directly from the energy of the operative fluid.

The pressure, instead of being exerted on a piston, is employed to set the fluid itself in motion; that is, there is a conversion of pressure energy into velocity energy as an initial step. When a large volume of power is desired the turbine is more economical, more compact, and less subject to vibration than the reciprocating engine. The turbine is highly favored for the propulsion of large fast vessels and the generation of power at electrical distributing stations.

Electric Power. Electricity may be the product of any of the sources of power already mentioned. When coupled to a dynamo, these sources produce the electric current, which can be carried over wires to the places where it is to be used. In the past electric plants have been more or less isolated and constructed with no relation to any section other than the one immediately about them. There is a growing tendency in late years, however, to unite the electric power systems of the country into what are frequently spoken of as super-power and giant-power systems. Thus one of the important problems in the use of electricity is the transmission of the current. Long-distance transmission had its start over thirty years ago; then a line

18 miles long, operating at 11,000 volts was constructed. Today a network of lines 1,200 miles long operates along the Pacific Coast at 165,000 volts. Wireless transmission of power also begins to have



A power or trip hammer. (Courtesy Olds Motor Works.)

practical aspects. Experiments recently carried out show that it is possible, at least over short distances.

Recent Power Inventions. We can mention only a few of the significant gains made recently in the harnessing of power.¹⁰ The Diesel engine, burning cheap, heavy oil, has made great progress in motorships, locomotives, and power plants, and has also been adapted

¹⁰ See *Recent Social Trends*, Vol. I, p. 140.

to automobiles and airplanes, decreasing fire risks and saving fuel weight and costs. Mechanical firing of boilers and the use of pulverized fuel has increased greatly since 1920, particularly in central

TABLE 26

INDEX NUMBERS OF PRODUCTION AND CONSTRUCTION IN THE UNITED STATES, 1922-1929 ¹¹

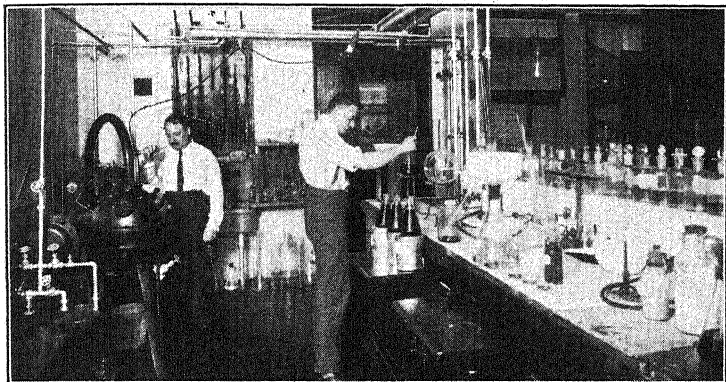
<i>Year</i>	<i>Total Production and Construction</i>	<i>Production of Raw Materials</i>	<i>Production of Consumption Goods, Total Including Residential Construction</i>	<i>Production of Capital Equipment, Total Including Nonresidential Construction and Public Works</i>	<i>Production of Machinery</i>
1922	100	100	100	100	100
1923	110	112	111	125	134
1924	109	115	110	112	121
1925	119	115	120	132	138
1926	126	122	125	147	153
1927	125	119	124	143	146
1928	131	122	130	145	157
1929	134	124	131	170	191

power stations, and has raised the efficiency of boilers up to 90 per cent.

Other Mechanical Improvements. Besides the power machines mentioned above, a flood of inventions promises to lighten in one way or another the burden of work. As a result of mechanisms for harnessing power, man's labor in modern industry consists largely in lifting, pushing, pulling, or striking things. To this may be added such processes as weaving, spinning, cutting, and forging. In present-day industry moving goods may mean a multitude of operations, from the handling of the raw materials to the handling of the finished product. The development of mechanisms to supplement man's labor in this task is outstanding. Cranes of various sorts, carriers and elevators, pneumatic devices, pumps and piping systems, are all utilized. If each large industry had to depend upon man labor for lifting and transporting the various products in the course of manufacturing, the present stage of development could never have been attained.

¹¹ Adapted from F. C. Mills, *op. cit.*, pp. 246, 252, 278, 280.

In the field of cutting, drilling, and boring, advancement has been no less marked. Saws set with diamond chips, or made of special steel alloys, are used in quarries and have eliminated slow, tedious hand-processes in the cutting of stone. Steel bars and plates are



The Department of Agriculture is the greatest research organization in the world. (Courtesy U. S. Dept. of Agr.)

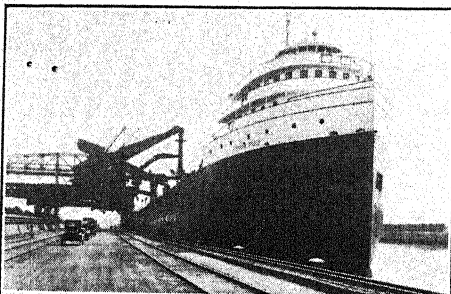
now cut or sheared with as little effort as if they were cardboard. Trip hammers are constructed with the control so accurate that they can strike blows of several hundred pounds or blows so light that they would not break an egg placed on the anvil.

Tremendous Increase in the Production of Machinery, 1922-1929. During the prosperous era following the World War, when physical production and standards of living rose swiftly, the development of machine facilities was even more rapid.

The most significant trend revealed in Table 26 is the far greater growth in capital equipment than in consumption goods, and the unequaled advance in the production of machinery.

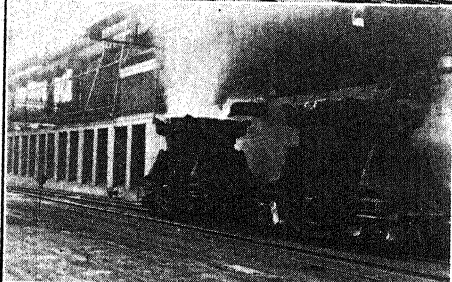
Industrial Research. Modern industry recognizes the importance of research as it never has before. Industrial research consists primarily in a systematic search for the solutions of certain definite problems. Most large corporations maintain efficient research staffs composed of some of the best chemists and physicists in the country, to study the scientific problems of the industry. Industrial laboratories are supplied with the latest and most efficient apparatus, and many of the recent great discoveries have come from them. The

SHORTENING THE



MONDAY 8:00 A.M.

After a trip of approximately 45 hours from Marquette the ore boat docks at the Fordson plant. Hulett unloaders start removing the cargo which is transferred to the High Line and from there to the skip car which charges the blast furnaces. By continuous process this takes ten minutes.



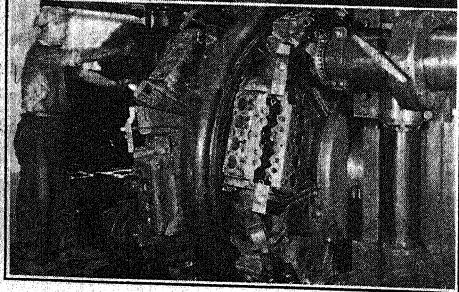
TUESDAY 12:10 A.M.

In sixteen hours the ore had been reduced to foundry iron, which is carried in a molten state to the foundry. In less than an hour it has been mixed with the proper proportion of scrap and poured into molds.



TUESDAY 1:10 A.M.

As the conveyor brings the molds past the pouring station the hot metal is cast into cylinder blocks. These go to the shake out station and are taken away to be cooled and cleaned. The cooling and cleaning process requires an average time of five hours.



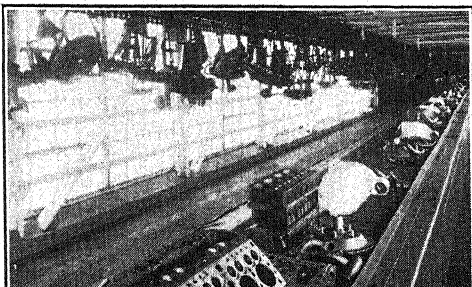
TUESDAY 6:10 A.M.

The casting now goes to its first machining operation. It takes two hours and forty minutes to machine the casting. This machining is performed in the foundry building in line with the Ford practice of continuous operation. It arrives at the motor room at 9:25 A.M., Tuesday.

PRODUCTION CYCLE

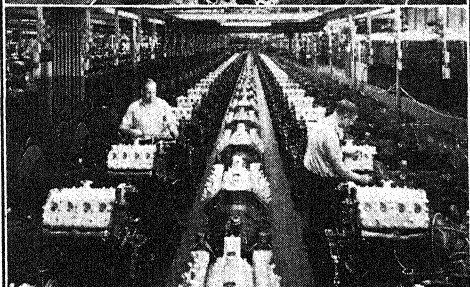
TUESDAY 9:25 A.M.

It requires two hours to assemble and block test the Model A engine. Except for "running in" to loosen it up, everything is done on the move until it reaches the testing block.



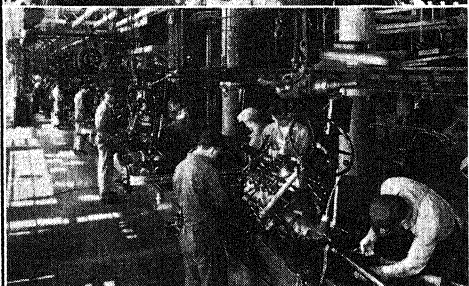
TUESDAY 11:25 A.M.

The finished and inspected motor comes out on a conveyor and is loaded into a freight car and shipped to an assembly plant. It takes about ten minutes to convey and load in the car.



WEDNESDAY 6:35 A.M.

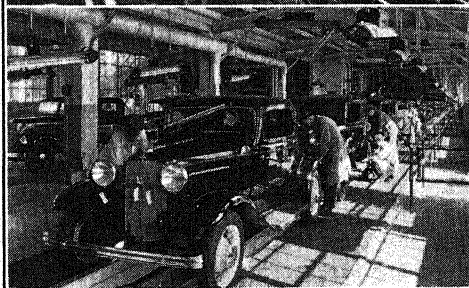
By this time the motor should have reached an assembly point 300 miles distant. It takes approximately thirty-five minutes to unload the car and carry the motor to the assembly line.



WEDNESDAY 7:35 A.M.

It takes one hour to assemble the complete car, so by 7:35 A.M. the car is ready for the dealer.

Long before noon the dealer will have taken delivery of the car and paid cash for it. Here is a conversion of raw materials into cash in approximately fifty hours. Of this fifty hours, twenty-four are consumed in shipping and handling. Even this record-breaking cycle is often shortened. (Courtesy Ford Motor Co.)



vacuum tube, which is at the basis of the radio, is an example of their achievements.

Scientific Research by the Government. Our national Government maintains the most important and largest research projects in the United States and perhaps in the world. The Department of Agriculture, for example, is constantly engaged in the solution of agricultural problems which require the joint effort of chemists, physicists, bacteriologists, and indeed workers in all scientific fields. The work of the Department ranges all the way from the study of the proper food for man and beast to the best methods for destroying such enemies of crops as the boll weevil and the corn-borer. Practically all departments of the Government carry on various types of research work. The value of such work to the citizens of this country and other countries cannot be measured. And its results are freely available to all.

SUMMARY

Man's progress from savagery to civilization has been accompanied by the increasing use of power other than his own brawn. Today, although there are great possibilities of advance in the direct use of inexhaustible sources of energy—the sun's rays, the heat of the earth, the tides—our chief dependence is upon fuels drawn from the earth, and upon machines fed by these fuels.

Mining production increased enormously from 1899 to 1929. Although the country is still rich in mineral resources, we face the necessity of keeping down the costs of production. This may be accomplished by maintaining our inventiveness in producing and utilizing fuels, and by remedying our wasteful method of organizing mining. Recent governmental projects for developing natural resources indicate a hopeful trend.

Machinery for the application of power to useful work has developed rapidly. During the last decade the production of machinery has increased at a faster rate than the production of raw materials, consumption goods, or even capital equipment as a whole. This uneven development, as we shall see later, probably contributed to the depression of the nineteen-thirties, but its rapidity reveals incalculable possibilities for raising our levels of living. Meanwhile continued scientific and technical research is necessary in order to promote further productive advances.

QUESTIONS AND PROBLEMS

1. What is *science*? Mention several scientific laws that were probably discovered by primitive man. Explain the difference between an invention and a scientific discovery, illustrating each. Which is more important as a means of promoting human progress? Give reasons.
2. Explain and illustrate the truth in this quotation: "Industrial progress is merely the multiplication of tools."
3. Mention ways in which the invention of machines and the control of sources of power other than human energy have affected man's standard of living. Have the outcomes you mention taken place as a result of the Industrial Revolution? Explain.
4. Describe the world's chief power sources. List those utilized in your community at the present time, naming industries in which each source of power is important.
5. What significant changes in sources of power have taken place during the last sixty years? Suggest changes in power that seem probable in the next sixty years. How would such changes affect living and working conditions?
6. Why is mining so important? What do we mean when we speak of the tendency toward increased costs in mining? Tell what is being done to decrease such costs.
7. What are the provisions of the Tennessee Valley Authority Act of 1933? What merits and demerits can you see in it?
8. List the most important mechanisms man has invented for changing energy into work. Describe with a drawing the way in which one of the mechanisms in your list operates. Mention two additional mechanisms that are needed for transforming energy into work.
9. Visit a factory or a mill to find the main sources of power and power mechanisms that are utilized in the plant. Include in your report a description of the occupations associated with the source of power.
10. Give an illustration, preferably in your own community, showing how scientific research affects production. How do modern industrial concerns promote scientific research? Describe one activity of the national or a state government that has the same end in view.

(For list of Readings in the Class Library, see the next chapter.)

Chapter 11

MAKING THE WORKER AN EFFICIENT PRODUCER IN INDUSTRY

THE WORKER'S PLACE IN THE PRODUCTIVE PROCESS

Men and Machines. No matter how highly developed machines become, man is the basis of the productive process. The efficient use of machines will increase output; careless work by the tenders will result in waste and stoppage. For no machine can exercise thought or discretion, and both of these qualities are necessary in even the most routinized factory. Training skillful workers and keeping them well and satisfied is therefore the most important task in effecting successful production.

The chief aim of machinery is to reduce the costs of production, and a prime element in cost is the demand upon human energy made by each unit of manufactured goods. If the factory wears out the worker so that his useful life is cut short by a decade or two, the apparent efficiency is a great waste even from the industrial point of view. The efforts of the workers are part of the productive process and human costs are the most important of all charges.

One might approach the problem from a seemingly different angle and say: "Men are *more* important than machines. We must keep men fit, not in order that they may work the machines better, but independently of what may happen to the output of industry. We must 'go easier' on the workers even when such a policy cuts down production." This is the more accurate approach, from the point of view of social welfare, and we shall consider cases—shorter hours, for example—in which it may be wise to help men by hindering

production. The final test of efficiency must always be the result of a given policy upon the lives and welfare of men.

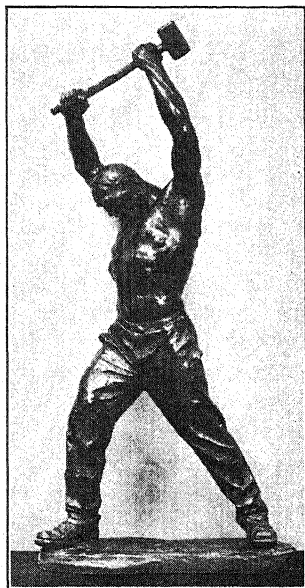
But the two problems—securing the welfare of the workers and facilitating production—generally call for solutions which are not incompatible. Better factory conditions mean better lives as well as better production. Better production results in more goods and also greater possibilities of consumption and of leisure for those engaged in industry.

Although real conflicts of interest still exist, the most helpful approach in improving production is to recognize that enlarged output increases the *possibility* of higher levels of living, and that better working conditions *can* help both employer and employee.

FAILURE OF SLAVE-DRIVING

Original Incentives to Industry. Since the beginning of civilized life men have engaged in work for three reasons: first, because they were driven to labor by a master if they were slaves; second, because man is naturally active and actually unhappy unless he has something to do; third, because the goods men want are scarce and require effort to produce. The economic organization of both the ancient and the medieval world and of the early years of our industrial era developed systems of slavery or serfdom in which men were forced to perform hateful activities by masters who profited by their toil.

Fortunately the growth of the surpluses that came from the industrial system built up institutions in the community which were the enemies of slavery. Such, for example, were schools and colleges. In addition, the general effect of the world's growing prosperity



The thoughtfully exerted energy of man is always the first step in harnessing natural forces to the service of mankind. ("Power," a bronze by Max Kalish. Photo, courtesy Grand Central Galleries.)

was an improved level of living, which was so important a feature of the last half of the nineteenth century. Even though the improvement in living standards was not shared alike by all classes, the levels of all classes were somewhat raised, and a prosperous people will not long remain content with slavery or semislavery.

New Incentives to Industry. As people came to have more leisure and to have access to more generous quantities of goods, they became more effective in organizing and in resisting the power of those who formerly had driven them to work. The result of this movement was a notable effort to change industry so that workers need not be driven to their tasks, but might find in them an outlet for constructive activity. Industrial managers have come gradually to the point where they see that industrial success depends not only upon the most effective use of natural resources and of the executive ability of the management, but also upon the spirit and endeavor of the rank and file of the workers. It is now increasingly recognized that industry must be organized so as to take advantage of the creative elements of human nature instead of depending upon the driving power of fear.

The natural tendency of human beings to be active continues to motivate work when slave-driving fails and disappears. But such a motive cannot be expected to operate effectively so long as we have factories that resemble prisons, in which the work is so monotonous, so wearing, and on the whole so dismal and degrading to human beings that a constant tendency toward revolt is developed. Decent and humane working-conditions must exist.

WHAT CONSTITUTES SATISFACTORY WORKING-CONDITIONS?

Fundamentals of Good Working-Conditions. If industrial success depends upon voluntary rather than involuntary endeavor, it is important to understand the foundation for the organization of industry which must exist to establish this result. Such a foundation seems to require the following fundamentals:

1. Workers must find satisfaction in their work.
2. They must feel their monetary reward to be adequate, and to be the direct result of, and in proportion to, the work they do.

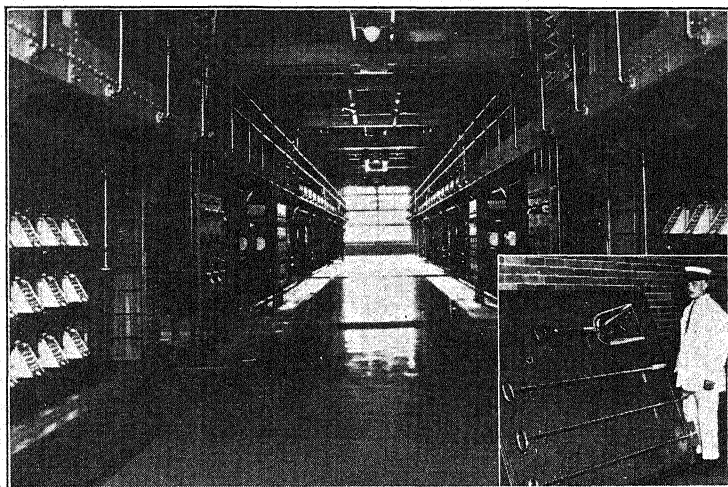
3. They must feel themselves a part of their productive group by understanding it, by having emotional ties to it, and by sharing in its control.

4. Their conditions of work—the kind of work done, the number of hours worked, the minimum wages paid, and the extent to which children are employed, must be improved over conditions now prevailing in most industries.

5. They must feel secure in their employment and their income.

6. They must be safeguarded not only against occupational hazards, but also against accident and old age.

The fifth of these requisites—security of employment—is so important that it will receive special treatment in Chapter XVI. The



The new and the old. The larger picture shows a boiler room in one of the Ford plants equipped with latest stoking devices. Relics of bygone days, as far as this plant is concerned, are shown at the lower right of the picture. (Courtesy Ford Motor Co.)

sixth,—protection against accident and old age—is an aspect of living-conditions, and will be discussed in the next chapter. We may now proceed to examine the first four fundamentals of proper employment.

Satisfaction in Work. When we say that workers must find satisfaction in their work, we probably state the most fundamental principle in the whole problem of industry. It must be clear at the

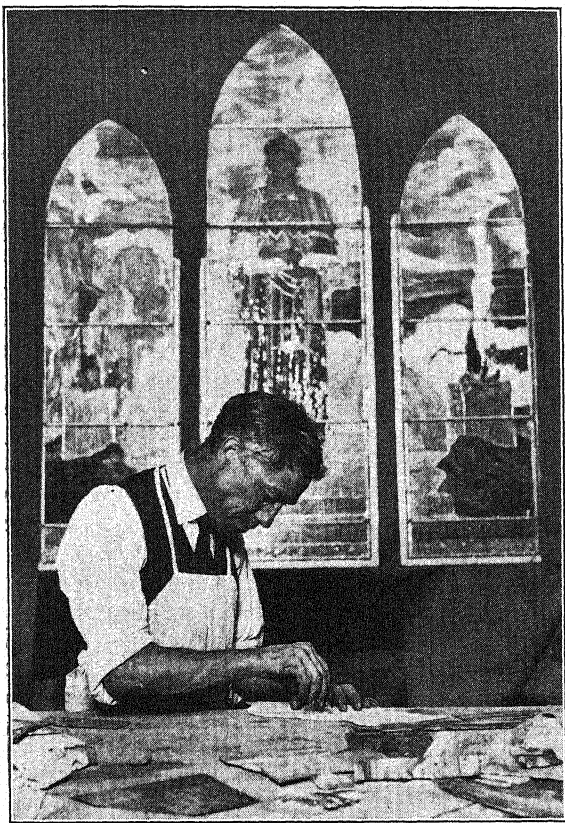
outset that we do not mean the mere satisfaction that comes from receiving pay. There should also be a kind of joy in the doing of the work itself, similar to that felt by the medieval artisan in his craftsmanship. The medieval craftsman made the whole of an article himself. Whether the product was a pair of shoes or a suit of armor, the work was all his own. Whatever praise was given for good workmanship came to him; the result of a lifetime of effort in making shoes or armor was the reputation in the community of being a good shoemaker or a good armorer, and this reputation was a precious possession.

Why Satisfaction Is Hard to Obtain Today. Several reasons make the kind of satisfaction just mentioned difficult or impossible for the modern workman. He does not make the whole of anything. Accordingly, when a ship sails down the harbor, or when a pair of shoes finds its way into the hands of a consumer, the person who uses the ship or who wears the shoes cannot attribute their good qualities to any one worker. They can neither curse him nor bless him. The old individual pride in the product has disappeared, and it is not possible for the community or even the worker's family, whose opinion he values most highly, to credit him for his efforts. On the contrary, his family and his neighbors probably know very little about his work. Thus, the machine system rather effectively removes the creative joy in work.

Such difficulties in modern industry must be faced. It may be possible to substitute for individual pride in product a kind of collective pride which will make a man say: "That ship I helped to make—along with a good many other people; but my work was as important as anyone else's." It is, perhaps, really practicable to develop a true *esprit de corps* among a group of workers.

Satisfaction in the Conditions Surrounding the Worker. What is perhaps still more practical is to make the modern factory a place in which a worker would rather spend his working-hours than to spend them in any other place he can propose. Indeed, the best type of factory is becoming not a prison into which men are forced in the morning and from which they escape at night as rapidly as possible, but a place for creative activity to which they go eagerly and which they leave with reluctance. Such is the feeling of a chemist for his laboratory, of a writer for his study, of a lawyer for his office. A sharp observer of industrial life may occasionally see just this sort of thing—obscure examples, perhaps, but suggestive of the future.

We already see in well-planned modern factories facilities providing light, air, cleanliness, and comfort. The whole tendency toward the



A craftsman constructing a stained glass window. Few men indeed have been known to tire of work of this kind. But how many men have opportunities for such work today? (Photo—Hine.)

betterment of the conditions surrounding modern work helps to develop a liking for the job.

Need for Adequate Payment. In an industrial system in which the standard of living of the worker and his family depends upon

the money income received from his work, it will not be enough to make his place of work a pleasant one. The worker must also receive an income sufficient to maintain him and his family on the comfort standard of life. The monetary reward should also be a direct result of, and somehow bear an understandable relationship to, the effort expended. The reward must be greater because of special effort or special intelligence. If compensation is to be a genuine incentive to industrial effort, it must come as a direct result of effort and in a direct ratio to that effort.

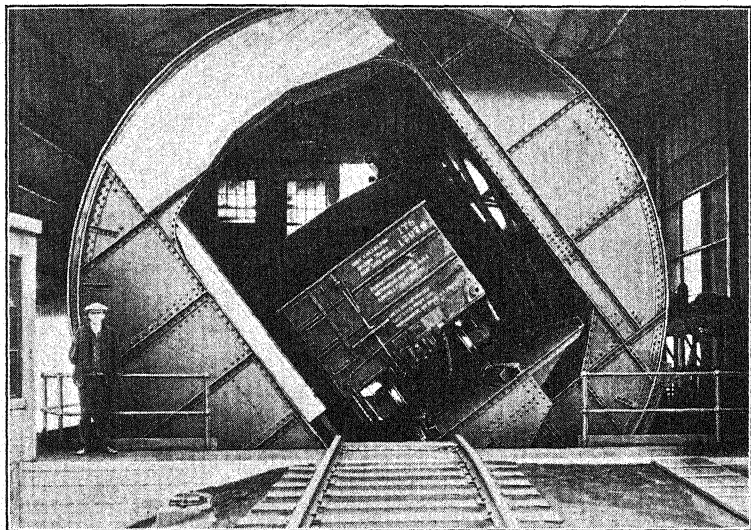
Workers Must Fully Participate in Industry. The worker must be regarded by the responsible managers of industry as a real and permanent part of the productive group to which he belongs—as important as profits and raw materials. This is one of the most difficult ideals to realize in modern industry. So far most industries have been organized and operated not to make goods but to make money, and when the making of money has meant the stoppage of the making of goods the managers have usually not hesitated to halt production. A plant which stops its activities must dismiss its workers and lose their experience, loyalty, and whatever efficiency they have developed as a working group. When a plant which has stopped resumes production, it faces anew the task of recreating the *esprit de corps* and developing teamwork.

Efficiency in modern industry also requires that the worker should not only feel himself a part of the group and have long association with it, so that he feels tied to it emotionally, but that he should also have a voice in its control. One obvious advantage in workers' participation in the control of industry is that it develops in the workers something of the fidelity to the industry that is felt by the small shopkeeper to his shop. It usually also insures the workers a larger share in the benefits of industry.

IMPROVING THE WORK OF ADULTS

Two Prime Evils in Men's Work. What is needed to better men's work in present-day industry is a reduction in the amount of both heavy work and monotonous work. These two kinds of labor are the bane of the modern worker's life. The heavy work is still done by men in such places as steel mills, cement factories, mines, and lumber camps. Examples of monotonous tasks may be seen in machine shops and factories.

Heavy work consists mainly in lifting, pushing, hauling, and striking. The earliest devices to help the man who had to do this kind of work were simple hand tools such as the hammer, the ax, and the lever. Much work must still be done by hand with shovels, sledges, and wheelbarrows. Heavy labor is also found in loading and unloading trucks and wagons, in moving materials and machines, and in breaking up and remaking raw materials. The tendency, however,

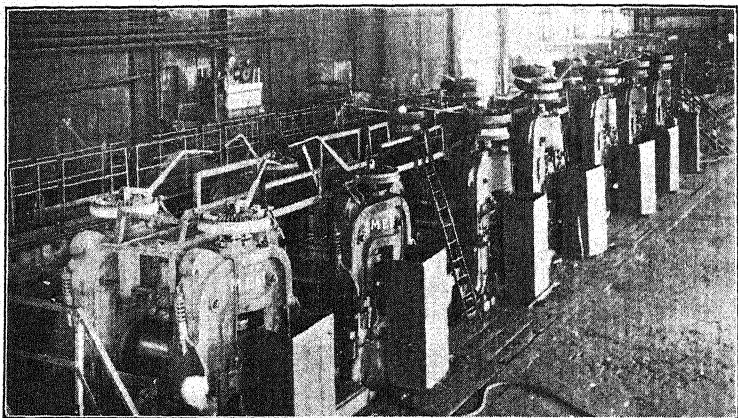


A rotary railroad car dumper. This device has yet to be put into very general use. (Courtesy Link Belt Co.)

is clearly toward doing away with such tasks. The typical machines which take man's place in doing work of the sort are steam shovels, mechanical hammers run by steam or compressed air, trucks handling loads from a few pounds to many tons, and conveyors carrying materials from one machine to another.

Monotony Replaces Heavy Work. In the process of eliminating heavy hand-labor, however, the other bad feature of modern industrial work crept in. As air hammers, mechanical shovels, lathes, presses, saws, and planes were invented, a new type of industrial work developed—machine-tending. This work involves little ex-

penditure of effort, but requires much of what is often worse, the monotony of attending a machine that repeats one operation again and again all day long. The worker at such a task must accommodate himself to the machine, becoming almost a part of it. Physical exertion has been reduced to a minimum and mental effort has also been practically eliminated. Tending a machine therefore calls for the use of only a very limited part of the faculties of a human being, and as a result the job leaves many abilities unemployed. This may



These rolling mill machines feed one another in an almost uninterrupted procession. (Courtesy American Rolling Mills.)

cause the individual the utmost distress, for if muscles and nerves are not used they are likely to become diseased and lead to serious trouble.

Relief Promised by the Machine. Relief from the heavy work which is too great a strain upon the human body results, then, from the use of machines such as the steam shovel and the mechanical hammer. Relief from the monotonous jobs that have replaced heavy work may also be expected, perhaps, from carrying the machine to its logical development. A job which requires few motions or simple effort from the worker is of the very sort that can be turned over in time to a machine. Much of our present machine-tending, therefore, is unnecessary, and in time we may expect machines to be linked together in such efficient series that they will automatically feed each

other and thereby carry out the operations of the entire undertaking without the aid of men.

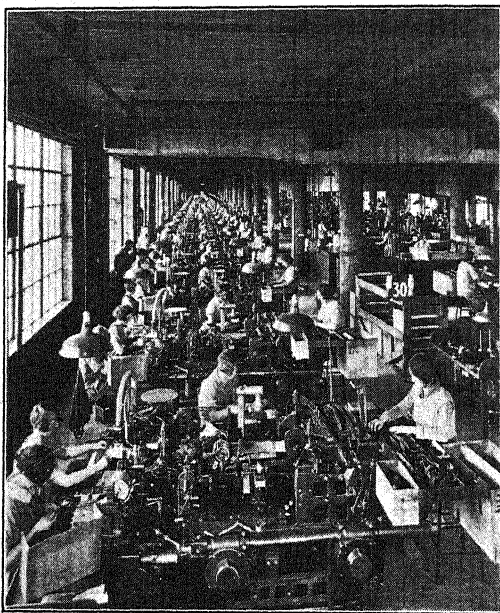
If society uses its machines wisely, nothing save improvement will result from turning monotonous work over to them. The machines will do the job more efficiently and will suffer no injury from unused capabilities. In addition, the worker will be greatly benefited by being removed from the responsibility of carrying on a task against which he is always in more or less conscious revolt, and which is far below his abilities. The man power of industry can thus be freed for the higher work of industrial life, for planning and adjusting industrial operations. Machine work ought to be turned over to machines; man ought to be reserved for man's work.

Relieving the Monotony of Office Work. Special mention needs to be made of the monotony of many clerical tasks. Millions of persons in the United States are engaged in the paper work of industry. To bend for eight hours a day above a turning-lathe, a polishing machine, or an air hammer is an unpleasant task, but it is scarcely less unpleasant to bend for an equal length of time over a ledger or a typewriter. Relief from such effort, however, may be forthcoming. In the last few decades a notable development of writing, recording and calculating machines has taken place. No one can say how far such improvements will go, but it is probable that, in so far as such tasks are repetitive, they will in time be performed by machines. Already there are in existence many book-keeping and calculating devices, inconceivable a few years ago, and it seems probable that the future will bring machines for all purely stenographic, calculating and recording tasks.

Present Need for Recreation. So far as the immediate present is concerned, need exists for relief from monotonous tasks in factory and office. This need is partly met by various forms of recreation and amusement. Human energy and ability must find an outlet. What is needed above all by factory and office workers is opportunity to get out of doors and to exercise both their minds and their bodies. Opportunities for such recreation are provided in part by city parks, low-priced motor cars, and recreational centers at mountain and seashore.

Number of Women Gainfully Employed. In 1930 over 10,500,000 women were gainfully employed, compared with 1,700,000 in 1870. This increase of sixfold in sixty years may be compared with the

less than fourfold increase in the female population sixteen years of age and over. Since 1880 the proportion of women gainfully employed as compared with the total female population sixteen years of age and over has increased annually every year except one. Ex-



Women are very well adapted to work at cigar rolling machines. The light and air here are excellent, but the work itself is unvaried and uninspiring. Furthermore, it is work that machines could easily perform.

great part of the heavier jobs and substituted for them the lighter but monotonous tasks of machine-tending that women and children could find a place in industry.

Fortunately for the future, women's jobs are of the very types that machines can perform with the greatest efficiency. In many industries at the present time factory managers consider only that the labor of women or child labor is cheaper than the cost of installing

including agriculture, out of every thousand women who are sixteen and over, the number gainfully employed during the past four decades has been 172, 202, 213, and 234, respectively. In 1900 women constituted 17.7 per cent of all gainfully occupied people; in 1910, 19.8 per cent; in 1920, 20.1 per cent; in 1930, 21.9 per cent.¹

Women's Work in Office and Factory. Women's work in offices and factories suffers from the same monotony as does men's. Indeed, it is depressing to realize that it was not until machines took over a

¹ *Recent Social Trends*, Vol. I, pp. 712-13.

and operating machines. Very often industrial managers decide not to install a labor-saving machine because women or children are available at such low wages that it would not "pay" to buy the machinery. As human considerations gain greater weight, however, the substitution of machinery for human effort will probably take place more readily.

Women's Work at Home.

A vast improvement in housework has occurred, but room for betterment still remains.

In such tasks as cooking, cleaning, laundering, sewing, preserving, and caring for children, much has been done to make the work of women efficient. In cleaning and laundering, for example, progress has been made by the invention of vacuum cleaners, electric irons, and electric

washers; in preserving fruit and vegetables, we now have many superior contrivances for pressure cooking and for sealing cans.

The machine age has further lightened women's work, as many traditional household tasks have been taken over by factories. Sewing as a household art has almost disappeared. Today not only is cloth made in factories, but it is cut, sewed, and made into clothes there too.



Our country owes an inestimable debt to the pioneer woman. But she has been supplanted by a new type with fewer cares and more distractions. ("A Native of Virginia"—by Gari Melchers. Courtesy of the Baltimore Museum of Art.)

Women's part in the care and education of children has also changed greatly with the growth of industry. In earlier days much of the education of a child was obtained in the home or on the farm. Girls were taught by their mothers to cook and sew and keep house; boys learned from their fathers a trade, or the work of field and stable and the raising of grain and cattle. Formal schooling occupied at most only a few months of the year. Today, on the other hand, schools take over many of the former duties of the father and mother. In spite of this lightening of the load, the ultimate responsibility for raising and educating children still rests upon the mother of the family.

Recent Trends in Women's Activities. In women's work improvement may take either of two directions. First, the home may become the center of the family life, with its activities made more enjoyable because they are more artistic and more efficient; or second, home duties may be exchanged for work in commerce or industry or for community activities. The influence of urban life on the home, growing ever more powerful, seems to make the second alternative the more probable. The city apparently is making the kitchen a kitchenette, transferring the family dinner to the restaurants, laundering to the steam laundry, preserving to the cannery, sewing to the factory, and the care of children to the school or nursery. For women who live in such situations a full-time career in home-making is increasingly impossible, and they are often forced to choose between a life essentially idle and going into the industrial world to find at least part-time work in office, store, or factory.

REGULATING HOURS, WORKING-AGES, AND WAGES

Hours. We have already referred to monotonous or unpleasant working-conditions in city occupations that make necessary some limitation of the hours required. Short hours are needed in factories where noise, motion, and monotonous effort abound, and especially those with poorly lighted and poorly ventilated rooms. A scientist or professional man whose time is his own can without injury work long hours; but a worker who has to repeat his task every day must think not of one stretch of work or of two, but of all the years ahead. His income and that of his family depend upon his continuous effort. He cannot take a day or two off to recuperate whenever he feels

like it. He is part of a machine, and when the machine moves he is expected to be on hand to do his task. ; .

Reduction of Hours of Work. For a number of years the United States Supreme Court held that it was invalid for any state to interfere with private business by regulating hours of work. But early exceptions were made in particularly wearing employments such as mining, and a famous series of court decisions allowed the regulation of women's hours of work in a wide variety of occupations. It has not yet been decided whether a state may regulate hours for all groups in all industries, and the same constitutional problem is involved in attempts of the federal Government to regulate hours.

The problem of reducing hours of work has been less a legal than a social-industrial problem. Practices have depended upon the conditions in the particular industry, the strength of the employees' bargaining power, and prevailing social attitudes. Not many years ago the usual hours per day in industry were twelve. During the era of prosperity following the World War, it was generally agreed that for average factory work, the eight-hour day should be the maximum, and that in certain industries the seven-hour day was preferable. By 1929, probably over half of the employees in manufacturing worked in establishments which had adopted the forty-four or the forty-eight hour week.

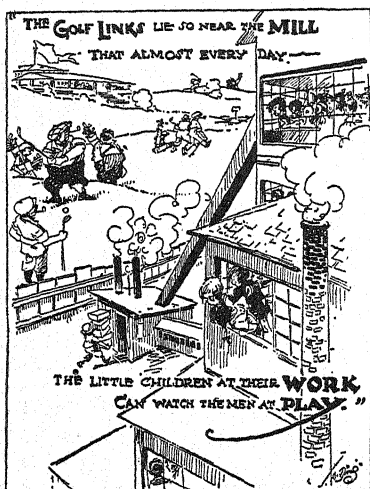
Effect of Depressions on Hours of Work. Nothing could be more erroneous than to suppose that hours of work go down in times of depression just because there is less work and less employment. True, in such times more people work only part time or not at all. But those who work full time frequently work harder and longer and for less pay than ever before, because the usual first move of employers in hard times is to cut down expenses by making fewer people do more work for smaller wages. It is impossible to get accurate figures, but much evidence indicates that the years of depression following 1929 swept away most of the gains made by the workers during the previous decade.

In the latter part of 1933, however, a nation-wide campaign for lowering hours of work in order to spread employment was manifested in the industrial codes under the N.I.R.A., which will be discussed more fully later on. This resulted practically in the establishment of the 40-hour week in almost all industry. It remains to be seen whether this gain will be preserved when there is no longer need

for spreading work, and whether the Supreme Court will sustain the legislation upon which it is based.

Child Labor. More than a million children between ten and fifteen years of age were reported by the Census Bureau as engaged in gainful occupations in 1932. This number is approximately one-twelfth of the total number of children of that age in the entire country. It must

be remembered also that the census does not report the number of working children under ten years of age, and that many such children are employed, particularly in agriculture, in street trading, in domestic service, and in industrial home work. As might be expected, nearly twice as many boys as girls are employed. Agriculture has a greater proportion of child workers compared with total workers than any other occupation, but a large number of children are also employed in factories, particularly in the textile industries. That such labor undermines the health and the physical development of boys or girls is too well known to need comment. Labor also interrupts their mental growth and interferes with their education for any calling beyond that into which they



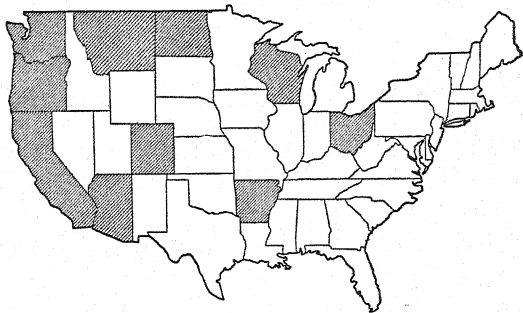
A cartoonist's view of the controversy over child-labor regulation. It was in a cotton-mill town that Sarah Cleghorn wrote the piercing lines around which the cartoonist has arranged his ironical picture. (© 1928 N. Y. Tribune Inc., Courtesy New York *Herald Tribune*.)

have originally gone. In addition it leads to the displacement of adults in industry by children, who can work for a lower wage.

Laws Regulating Child Labor. The evils of child labor led to the passage of two Congressional acts forbidding child labor in factories whose products were to enter interstate commerce. Congress has no power to regulate industry within state borders, but it has the power to regulate interstate commerce, and it was thought that by such legislation Congress might decrease the amount of child labor. The Supreme Court, however, held both of these acts unconstitutional,

stating that Congress was trying to regulate industry within a state by indirect means. The liberal jurist, Oliver Wendell Holmes, dissented from the opinion of the Court, and his reasoning won support from many sources. Some time after the decision referred to Congress proposed an amendment to the Constitution so as to permit federal control of child labor, but the required number of favorable responses from the states has not yet been secured.

Under the N.I.R.A. in 1933, child labor was practically banished from American industry. The permanence and constitutionality of this step are yet undetermined.



The shaded states have ratified the Child Labor Amendment (as of June 1, 1933.) The N.I.R.A., however, has indicated a new method of preventing the exploitation of youth.

Minimum-Wage Legislation. The argument for fixing levels below which wages may not be paid is well summarized in a recent report by a New York official.

Half the workers in low-skilled lines do not receive sufficient wages to sustain themselves independently nor to support their families properly. Although the earning capacity of most workers is relatively high, the large numbers of young women who live at home and the constant influx of immigrants with low standards of comfort depress the rates of wages. . . .

The rates fixed by many establishments are not based upon a consideration of the needs or efficiency of the workers, nor upon the capacity of the business to pay more, but upon the judgment of an individual manager and the custom in the trade.

Because of their youth, their inexperience, and their timidity, most workers cannot individually secure advancement; because of lack of organization they cannot obtain trade agreements upon wages. Meanwhile this situation of a great multitude of underpaid working people has a direct bearing upon the growth of poverty, vice, and degeneracy throughout the community. If employer and employee will not unite to remedy conditions, the State must act in order to secure public welfare.

In 1923 the Supreme Court held a statute providing for minimum wages under certain conditions in the District of Columbia unconstitutional. The Court argued, as in early labor cases, that such regulation by a state (or governmental division) interfered with the right of business men to make contracts as they saw fit. Again Justice Holmes dissented, saying that he saw little difference in principle between regulating wages and regulating hours (which by this time the Court had allowed in certain cases). But the Court has been adamant, and the decision nullified minimum-wage legislation in thirteen states, Porto Rico, and the District of Columbia. In 1933 the National Industrial Recovery Act provided for a nation-wide plan of minimum-wage regulation, which may be upheld by the Supreme Court when a test case arises, and which will be discussed at length in the last section of this book.

SUMMARY

The welfare of the worker is the most important index of the success of the productive process; first, because the quality of human effort is as important as the power of machinery in making industry a success; and second, because the success of the factory must be measured in terms of its effect upon the worker as a human being as well as in terms of its efficacy in producing goods. However, these two problems are closely interrelated, since better conditions of work increase production and in turn better production makes possible better conditions for living and working.

To improve working-conditions, new incentives to industry must be substituted for the driving force of fear and want. Workers must find satisfaction in the creative quality of their work and in the character of their surroundings. Monetary reward must be both adequate and based upon relative merits. The worker must be a vital, conscious part of the productive process. Heavy and monotonous work for both men and women must be given over to machines, and people left free to do work calling for some variety of physical effort and a certain mental exertion.

The regulation of hours and conditions of work, and the establishment of minimum wage laws, have had experimental beginnings of wide scope under the N.I.R.A., but the constitutionality and practical results remain to be seen.

QUESTIONS AND PROBLEMS

1. Why is the worker a vital part of the productive process? Is it probable that machinery will some day make the worker unimportant in industry?
2. Is there ever a genuine conflict of interests between the workers and those owning the productive machinery? In what way would you determine how such a conflict should be settled?
3. Is better production likely to improve working-conditions, or merely to better living-conditions? Give reasons.
4. Why do people work? Can you suggest any reasons not mentioned in this chapter?
5. Explain five important conditions of employment that must be met if the highest success in production is to be attained. To what extent do such conditions seem to be provided in the industries in your part of the country? Give examples.
6. Name occupations in which the workers will probably receive little satisfaction in doing the task itself; mention others in which gratification is likely to be found. Account for the difference—does it depend on the character of the job, or the character of the worker, or perhaps on both? Explain.
7. Suggest what might be done to improve the situation in occupations in which the character of the work prevents satisfaction to the workers.
8. Explain the two chief needs in bettering men's work. How has progress been made in meeting these needs during the last fifty years? What grounds exist for thinking that further improvement will take place in the future? Be specific.
9. What does this statement mean: "Machine work ought to be turned over to machines; man ought to be reserved for man's work."? Illustrate, showing how the achievement of this would better man's work.
10. Tell how office work has changed in recent years. Are the changes that have occurred of advantage to the workers? Give reasons for your conclusion.
11. Define drudgery. Give examples of work that you regard as drudgery. Assuming that certain essential tasks are necessarily drudgery, suggest ways to compensate the workers engaged in such tasks. Are *any* tasks *necessarily* drudgery? Explain.
12. Describe the chief kinds of work done by women. Explain the main objectionable or distasteful features in each of the lines of work, as seen by the worker. Suggest ways of removing or relieving each feature you name, giving examples whenever possible.
13. Compare the hours of work in city trades with the working-hours on most farms in your part of the country. Point out two ways in which work in a

trade differs from work on a farm. What relation, if any, do these differences bear to working-hours?

14. How extensive is child labor in the United States? Explain the main evils of child labor. How is the problem greater in the case of boys than in the case of girls? Why is child labor more difficult to control in the country than in the city?
15. Why is national legislation necessary to control child labor? Tell what must be done in order to secure a national child-labor law.
16. Why can a state regulate hours of labor, but not control rates of wages? Do you think there is a great difference between the two kinds of regulation?
17. *Question for debate: Resolved*, That minimum-wage legislation applicable to the employment of all unskilled labor throughout the state is a social and economic good.

READINGS IN THE CLASS LIBRARY

1. "Revery and Industrial Fatigue," Elton Mayo, Weld and Tostlebe, *A Case Book for Economics*, pp. 109-19.
2. "The Conquest of Power," Wells, *The Work, Wealth and Happiness of Mankind*, Vol. I, pp. 117-34.
3. "Distinctive Work for Women," *ibid.*, Vol II, pp. 612-18.
4. "Human Conservation and Labor Legislation," Patterson and Scholz, *Economic Problems of Modern Life*, pp. 501-26.
5. "Mechanical Progress and Industrial Efficiency," Forman, *Sidelights on Our Social and Economic History*, pp. 189-92.
6. "The Cry of the Children," Elizabeth Barrett Browning, *ibid.*, pp. 224-26.
7. "Child Labor in 1925," *ibid.*, pp. 286-91.
8. "Worker Output," R. F. Couch, Hill, *Readings in Vocational Life*, p. 46.
9. "Child Labor," J. C. Lathrop, *ibid.*, pp. 70-73.
10. "Robots," Chase, *Men and Machines*, pp. 142-48.
11. "Saving Labor," *ibid.*, pp. 183-203.
12. "The Pressure of Technology," *ibid.*, pp. 289-300.
13. "Fanny Herself," Edna Ferber, Center, *The Worker and His Work*, pp. 64-71.
14. "The Open Hearth," H. S. Hall, *ibid.*, pp. 178-91.
15. "The Iron Woman," Margaret Deland, *ibid.*, pp. 192-98.
16. "Development of Scientific Management," Marshall and Wiese, *Modern Business*, pp. 63-90.
17. "A Worker's Experiences with a Personnel Department," *ibid.*, pp. 129-49.
18. "Personnel Administration," *ibid.*, pp. 150-79.

19. "Fitting the Man for the Job," *ibid.*, pp. 189-94.
20. "The Machine as a Producer of Wealth," Hayward and Johnson, *The Story of Man's Work*, pp. 174-80.
21. "Prohibiting Child Labor," O. R. Lovejoy, Hart, *Twentieth Century United States*, pp. 477-82.
22. "Ingenuity in Motor Manufacturing," Henry Ford, *ibid.*, pp. 649-54.

Chapter 12

PROMOTING EFFICIENCY BY IMPROVING LIVING-CONDITIONS

REDUCING RURAL ISOLATION

American Farm Isolation. The isolation and solitude of farm life is an American problem. It does not exist in a European community, for in Europe farmers live in villages and go out to their farms to work. In America, however, farm families live upon the acres they cultivate and as a result each farmstead is separated from its neighbors, sometimes by a considerable distance. A farming community therefore is a different kind of social group from any familiar to urban people. It is a group made up of individuals who until recently have actually met only at infrequent intervals.

Reduction of Isolation by Communication. In recent years changes have occurred which have tended to lessen the effects of distance. Farmsteads remain separated for the most part, but the separation has in a measure been broken down by the telephone, the motorcar, and hard roads. On the 6,000,000 farms of the United States, there are approximately 5,000,000 motorcars. These cars have made possible a kind of community life in the country that was unthinkable forty years ago. Then each farm family was to a large degree forced to be its own community, and the resulting isolation from outside influences proved a serious hindrance to the spread of new ideas and knowledge about new inventions and processes. In addition, the solitude that attended the work of both men and women was most depressing. The relief from loneliness which came with the new inventions was a most welcome and helpful change.

Growth of County-Wide Social Life. Improved transportation and communication have resulted in the rapid growth of county-wide social organizations. Notable examples are the 4-H clubs, the Farm and Home bureaus, libraries, health units, and social-welfare agencies. Together with this change, the farmer has become a villager.



Even in winter, the pleasure vehicle is assured a clear road from the lonely farm to the big town. (Courtesy Caterpillar Tractor Co.)

These facilities make possible not only the multiplication of contacts over a larger area than the farmer of the horse and buggy stage knew; they also make possible the multiplication of local contacts. Neighboring farms are only a few minutes distant, not an hour. The farmer is adjusting himself rapidly and willingly to the new and larger community. This is not to be questioned. He has sacrificed many of his old service institutions. In many places he seems also intent upon retaining something of the old social life. In others he is persistently building something to take the place of the old, something to fit the modern age, something that will express his new interests. . . . Like the urbanite who, utilizing what the city offers, shares more intimately in the life of a Greenwich Village, a Gold Coast, or a Morning-side Heights, the country man is experimenting with a social life with more than one center and with more than one set of interests. He is altering his immediate locality organization, recognizing himself all the while as a part of the village community.¹

¹ J. H. Kolb and E. de S. Brunner, "Rural Life," *Recent Social Trends*, Vol. I, pp. 497, 509.

Rural-Urban Relations Grow in Importance. Direct contacts are increasing whereby the farmer and the villager avail themselves of the facilities of the city. The most striking instance is in the purchase of clothing and preserved foods. The city offers a wider variety of goods and sells some goods at lower prices. Rural families drive a hundred miles or more over hard-surface roads to spend a few hours shopping in the big town, and frequently stay into the evening for the movies or other recreation. In this way they meet city people and see city habits of living. Secretly the American rural dweller often envies his city cousin, while the



The old-fashioned country hops appeal to our imagination. But they represented a narrow culture, unrefreshed by contacts with novel customs and ideas. (From *Harper's Weekly*, November 13, 1858. Used by permission.)

average urban citizen sometimes has an ignorant, unthinking disdain for the countryman.

Similarly the city has invaded the country, but in a more subtle way. Urban management has increased its control over country banks and industries. The chain grocery store is an example. Rural social institutions are more and more dominated by boards with the urban viewpoint. Luncheon clubs, parent-teacher associations, and women's clubs receive suggestions from outside through the medium of regional, state, or national offices.² In such ways the rural isolation of the past is being lessened or removed entirely.

IMPROVING RURAL OPPORTUNITIES FOR EDUCATION, RECREATION, AND CULTURE

The improvement in rural education and recreation has been pointed out (pp. 103-104). The radio has also been of special value to the farmer for recreational purposes, as well as for education. It is not

² *Recent Social Trends*, Vol. I, pp. 536-37.

hard to imagine the difference it makes to a rural family to be able to listen to famous orchestras and to overhear the proceedings of distant meetings of various kinds. The radio has made the farm family feel itself a part of the great world. The reduction in cost of popular literature has had somewhat the same effect, for most rural families



A school of the old type. No matter how competent the teacher, a frightful waste of time is involved when several grades, each with lessons to be heard separately, are crowded into one room. The new union schools in many sections are a tremendous improvement, made possible by good roads and the school bus. (Photo Hine.)

now keep in touch with the events of the times through the newspapers and the weekly magazines.

Changes in Rural Culture. The contacts with the outside world made possible by the press, the radio, the automobile, and the motion picture have greatly altered local standards, so that the cultures of various rural communities tend to become alike. In part a favorable, and in part an unfavorable, development, the change has caused good as well as bad elements of local culture to be given up and has led more and more to the predominance of the city. Fashions, recipes for cooking, and even slang have to a large extent come to be not elements of a localized culture, but common to the whole country.

The main drawback of the change in rural culture is that the fashions originating in cities are intended to be city fashions, the recipes

are intended for city tastes, and the slang is expressive of city ideas. In consequence such characteristics are not entirely suitable for rural America. Although there is a gain in that the whole country comes to feel more nearly the same emotions and tends therefore to become more unified, the rural community loses in this way rich cultural elements peculiar to rural life.

Whether on the whole the citifying of country life is desirable or not, it exists and will continue to exist, local differences will become less and less important, and wider and wider areas will continue to have more and more in common. If we do not approve the change, we can at least feel satisfaction in knowing that the opportunity for the development of intellectual life grows richer along with the loss in local color, since not only do newspapers and the radio bring amusement to the rural home, but they also bring contacts with fields of scientific endeavor and fresh impulses from centers of culture.

IMPROVING RURAL DIET, SANITATION, AND HEALTH

The betterment in rural conditions has been pointed out already (pp. 103-104). Improved roads and automobiles have made possible quicker access to hospitals and civic health centers as well as to abler physicians, and have thereby contributed to the betterment of rural health, especially in the emergencies that often arise in isolated communities.

IMPROVING THE HEALTH OF CITY DWELLERS

City-Planning to Avoid Congested Living. In many ways the improvements which elevate country living have the same effect upon city dwellers. The radio, the talking picture, and the automobile mean as much to one group as to the other. As has been pointed out, in recent years there has been an increasing tendency for city and country to display more similarities and fewer differences. But certain peculiarities of city life deserve attention.

In order to raise the standards of health in the city we must first know what are the enemies of health. When we analyze the situation we find that the congestion of population which has followed the growth of market centers and factory districts is as responsible for disease and death as are the faults of the individuals themselves. Any attempt to raise the standards of health, therefore, must begin with

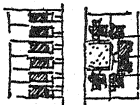
the improved planning not only of the houses in which people live, but also of whole neighborhoods and even of cities and towns. Socially-minded persons have not been slow to realize this necessity, and accordingly they have given much attention in recent years to town and neighborhood planning, even to the extent of rebuilding large sections of some cities.

Obstacles to City Planning. The need for town-planning grows out of the fact that when towns and cities were founded people had no idea of the developments that would take place in later years. New York City, for example, was established with many streets running across Manhattan and a few avenues running the length of the island; the early inhabitants thought that the rivers on either side of the island would provide for north-and-south communication. For modern needs, however, the plan ought to be exactly reversed, for the present street congestion and housing difficulties in New York come directly from this unfortunate layout. Other cities are scarcely better off. In many communities whole blocks have been filled with houses, leaving no room for recreation except on the street

Group Planning

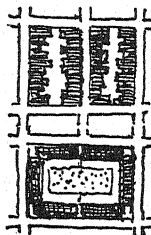


Two houses are combined on adjoining lots. Each has more usable free space.



Six houses are built as a group. All are enhanced in outlook, privacy and open area.

Community Planning



Forty builders fill up two city blocks with a motly mass of ugly and crowded tenements.

The community planner omits a costly street and groups more efficient and more open dwellings around a beautiful central garden.

Town Planning



A town is planned for platting and selling convenience. Ten per cent to 40 per cent is taken for indiscriminate streets.



A town is planned for efficiency and better living. Utilities are massed along main arteries with quiet and economical streets for residential use and large open areas are gained in interior locations.

(From *The Survey Graphic*, May, 1925.
Used by permission.)

itself. Poor planning or none at all is evident not only in American cities but also in cities all over the world.

Problem of Housing. The problem of housing is quite different from that of city- or town-planning. The latter has to do with the whole community, the former with the actual housing of the individual family group. More and more, however, good housing depends upon good community planning, and in the modern town or city the two are directly related. But as yet no American city has done more than define certain minimum housing standards which are intended to protect health. Several cities in foreign lands have gone further, and where housing facilities provided by private capital were inadequate, have undertaken building programs of their own.

Company Towns. In America there are many *company towns*. Such communities exhibit some of the best and some of the worst symptoms of our civilization. Certain company towns discourage all impulse toward home betterment, presenting rough and drab exteriors and interiors without contrivances for comfort. Others are so planned and constructed as to far surpass the independent village or city in beauty and living-conditions. The chief difficulty with the older type of industrial town was a tendency toward monotony of design and the building of rows of houses that were all alike. This feature may easily be avoided, as has been demonstrated by successfully planned communities of similar origin.

Different Plans for Improvement. The main considerations in any kind of town- or city-planning are the guarding of air, light, and space. These elementary provisions may be secured in an industrial center either by making the factory the center of a garden city and developing there a company town, or by placing the factories in a separate zone, reserving other sections of the city for purely residential purposes. Each plan has advocates, but neither fits the situation in most American cities, for most American cities are not only industrial centers, but are also market centers in which much trading is done and in which, consequently, many office buildings are crowded together in one section of the city. Assuming that crowding is necessary on account of market functions, it is still possible to have residential sections with cheap transportation to and from the center of the city.

American Neglect of City Planning. American cities have not taken seriously the responsibility for physical improvement which

every year grows more pressing with increase of population and with changes in industry. Even our national capital, Washington, if we except the official sections of the city, contains many of the undesirable features of other American cities in spite of the fact that from its very beginning Washington has had one of the finest city plans.



An architect's sketch of two super-blocks at Radburn, N. J., showing houses in solid black, and the system of closed-end streets, pedestrian paths, and interior parks. Children have no streets to cross in going to school. (Courtesy City Housing Corporation.)

If this is true of Washington, it is far more true of New York, Chicago, Philadelphia, San Francisco, and other great cities of the country. Many of these cities, notably Chicago, have become aware of the ways in which their natural advantages have been misused and have attempted to establish requirements which mercantile houses and office buildings must observe. New York has tried to establish city zones in which buildings are to conform to standards intended to protect the community. These efforts, however, have failed to protect the community against overcrowding, for none of

the so-called city plans provides relief for home-makers; instead they center attention upon streets, public buildings, and parks.

Problem of Medical Care. Toward the end of 1932 the first comprehensive studies of the economics of medical practice were brought to a close by the publication of two reports to the American Medical Association, one by the Committee on the Costs of Medical Care and one by the Commission on Medical Education. These exhaustive studies reported the following serious defects in the treatment of sickness in the United States:

1. The cost of securing adequate medical care is too great for the vast majority of wage-earners. People are unable to have medical treatment when necessary.

2. The distribution of physicians is bad, so that there are too many doctors in certain areas and too few in others, particularly in rural communities.

3. Hospital facilities are not available to a majority of the sick, and almost 50 per cent of city physicians have no hospital connections.

4. The earnings of the average physician are low.

5. Although the scientific side of medical science has made great strides, the technique of applying that science to the masses of the people has lagged seriously.

6. Preventive medicine is insufficiently developed.

7. Specialization and the study of rare ailments is overemphasized at the expense of the widespread care of the common illnesses.

The majority report of the Committee on the Costs of Medical Care made the following suggestions, involving great changes in the organization of medicine:

1. Medical services should be unified and grouped around hospitals.

2. Public and private health services should be made available to the whole public "according to its needs."

3. "The costs of medical care should be placed on a group payment basis, through the use of insurance, the use of taxation, or through the use of both these methods."

4. "The study, evaluation and coördination of medical services [should] be considered important functions of every State and local community."

5. Medical education should be broadened by emphasizing preventive medicine and social elements in medical practice, and by restricting specialization.³

³ These are merely the more important recommendations of the committee, not a complete account.

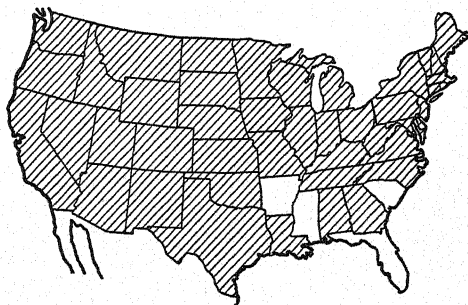
This report, with its emphasis upon group facilities and group payments, approaches, if it does not reach, the socialization of medicine. Suggestions are of course not actualities, and within the medical profession itself there is great opposition to the report of the committee. But the study at least shows the weaknesses in our handling of medical care today, and any attempts at improvement are likely to take the direction recommended by these reports.

SOCIAL INSURANCE

Theory behind Social Insurance. Along with developments for guarding the health of the community has gone a movement for insurance against illness, accident, and old age. Laws to promote these objects are based upon the belief that industry, being responsible for the workers in its service, ought to bear as part of the cost of production some of the expense of caring for an injured workman and of supporting his family during his incapacity; and that society also should help to protect the individual against the hazards of the working-life and the workless years of old age.

Workmen's Compensation Laws. Workmen's compensation laws (insurance against accidents) providing medical care and money benefits now

exist in all the states except Arkansas, Florida, Mississippi, South Carolina, and the District of Columbia. Federal laws also protect employees of the national Government and longshoremen working on ships in harbor. A few states provide insurance for occupational diseases as well as for accidents. The usual provisions of such laws are summarized in *The American Labor Yearbook*:⁴



⁴ Published each year by the Labor Research Department of the Rand School of Social Science. The quotations are from the *Yearbook of Agriculture 1928*, pp. 222 et seq.

All compensation laws require the employer to furnish medical services and supplies. In 16 States, in Hawaii and Porto Rico, and under the two federal laws, medical services are to be furnished as long as they are needed, subject to the approval of the compensation board. Other States limit either the period or the amount of the services, but permit the worker to appeal to the board to have them extended.

All the laws except those in Oregon and South Dakota provide for a waiting period, after the accident, during which no compensation is paid. In five States and in the two federal acts the waiting period is less than a week; in 29 States it is seven days; in three States it is 10, and in four it is 14 days. . . .

Fourteen States and the two federal acts allow the worker 66⅔ per cent of his wages while he is laid up. Seven States allow 65 per cent, six and Hawaii allow 60 per cent, three allow 55 per cent, and the rest allow 50 per cent. Arizona, Oregon, and Washington set no maximum or minimum, but the rest of the States have lower limits ranging from \$3 to \$8 a week and upper limits ranging from \$12 to \$25. Thirty-four States have a maximum number of weeks during which temporary compensation may be paid, or a maximum number of dollars that may be paid, or both. The time limits range between 200 and 500 weeks, with 1,000 in Wisconsin. The money limits range from \$1,500 to \$8,500.

If the total disablement incapacitates the worker permanently, he continues to receive a fractional wage every week in 15 States and under the federal employees' law. In the other States the limits range between 260 and 500 weeks, (1,000 in Wisconsin) and from \$3,000 to \$19,500. A few States give special consideration to young workers, who have a greater life expectancy and are still earning low wages, when they are injured. . . .

If the injury causes death, the funeral expenses must be paid in addition to compensation for dependents, except in nine States and two territories. In seven States and under the two federal laws the maximum for funeral expenses is \$200. In 20 States and Alaska it is \$150.

The widow receives 35 per cent of the weekly wages until her death or remarriage. For each child under 18 there is an allowance of 15 per cent or more. Total compensation may not exceed 66⅔ per cent.

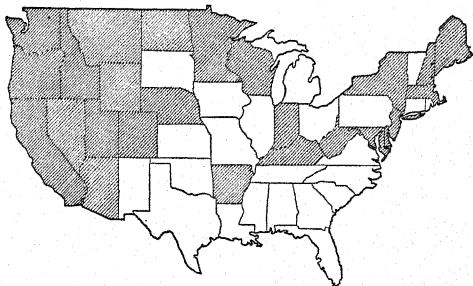
Old-Age Pensions. The same *Yearbook of Agriculture 1928* summarizes the situation as to old-age pensions as follows:

Pensions for poor old people are provided by statutory insurance in 26 foreign countries. In 15 of these, the pensions are financed by contributions made by the worker, the employer, and the government, and in one they are voluntary. Germany was the first country to adopt this type of plan for workers in general, in 1899; in 1913 it added white collar workers.

Eleven foreign countries use the other method: the government pays out the pension to old people who have no other means of support, instead of sending them to an almshouse or a poor farm. It has been found that the old people prefer to be pensioned and also that it is cheaper than keeping up an institution. . . .

In the United States, one of the earliest attempts to secure old age pensions was a bill for federal pensions, introduced by the Socialist Congressman Berger, in 1911. Federal bills have often been introduced since then. In 1920 Congress passed a retirement act establishing a contributory system for federal employees.

Among the States, Massachusetts first took notice of the problem by an investigation in 1907. It authorized savings bank life insurance in 1908, but the system has been utilized by few. Fifteen States have held one or more inquiries since then, and bills have



The shaded states have some form of old-age pension law (as of June 1, 1933).

been introduced into almost every legislature. The first results came in Arizona and Alaska. Arizona passed a pension law by initiative and referendum, but the courts held it void because of a series of minor flaws. Alaska offered persons eligible for its pioneers' homes the alternative of a pension. The trustees of one of the homes decides how much the pension shall be. . . .

Since 1922 10 State legislatures have passed pension laws. In California, Washington, and Wyoming the governor vetoed the bills, though in Wyoming he endorsed the principle. In Pennsylvania the law of 1923 was held unconstitutional in 1925. The State supreme court pointed out the clause in the State constitution which forbade appropriations for benevolent purposes. The State had always had a poor law, but that the court held did not justify the new statute which covered many more persons—all who had less than \$3,000 or an income of less than \$365 a year. The legislature took the first step toward a constitutional amendment and authorized a further inquiry. But the amendment was defeated on the second vote in the legislature of 1927, and the issue cannot come before the people as a constitutional amendment until 1933. . . .

Montana's old age pension law of 1923 left the financing and administration of the plan to the county boards. Most of them had accepted the plan by 1927, when Butte, the largest city, took it up on grounds of economy. The county commissioners may award any suitable pension up to \$25 a

month. In the first year the average pension was about half the maximum. The next year showed that the average cost of pensioning was about 27 cents for each person in the population. It cost Montana five times as much to keep an old person in an institution as to pension him. The third year showed that, out of every 1,000 population, about 2.5 had applied for pensions, 2.2 had been granted pensions, and 1.4 were receiving pensions. . . .

Wisconsin in 1911 provided for State life insurance, but little use was made of the plan. In 1925 it passed a pension law. This authorized each county to pay pensions, and to abandon the plan after a year if it wished. The county



Dinner time at a Missouri poorhouse. Does this miserly treatment preclude the need for adequate old-age pensions? (Courtesy American Association for Labor Legislation.)

judge decides what amount is proper and his decision is final. He may not grant more than enough to make the pensioner's total income \$1 a day. The State pays a third of each pension. In the first year six counties accepted and one revoked its acceptance. . . .

In 1926 Kentucky passed a law like Wisconsin's, but the maximum pension which a judge may fix is \$250 a year. Beggars are excluded, and persons able to earn \$400 or having an income of \$400 or owning \$2,500. The State does not help the county to pay.

In 1927 Colorado and Maryland passed similar laws, which excluded persons with more than \$3,000 or with some one legally responsible for supporting them.

Foreign laws fix the pensionable age at 60 or 65, but American state laws put it at 70, except that it is 65 in Maryland.

Proposals for Health Insurance. The provisions of the standard bill for health insurance prepared by the American Association for Labor Legislation would make protection compulsory for all whose earnings were less than \$100 a month. In case of sickness, accident, or death (not otherwise met by workmen's compensation) the insured would receive medical, surgical, and nursing attendance up to 26 weeks a year. A cash benefit equal to $66\frac{2}{3}$ per cent of wages

would be given from the fourth day to the end of the illness, with a 26-week limit. A funeral benefit up to \$50 is included.⁵

Funds to furnish such insurance would be provided by contributions from the workers themselves, their employers, and the Government. Ordinarily the Government would contribute one-fifth and the worker and his employer each one-half of the remainder. If wages are very low, the worker's share would be less. The cost to a worker earning \$600 a year is estimated at \$24.

Merits and Demerits of Health Insurance. Some people object to health insurance, maintaining that it is better to divide among the workers as wages all the income to which they are entitled rather than to set aside part of it as insurance. On the other hand the advocates of social insurance urge that experience has revealed most workers to be generally careless about the future; they therefore need protection against their own inability to foresee future emergencies; and the need is more serious when helpless dependents are involved. The proponents also insist that the cost of insurance should be borne partly by employers, thus helping to give a larger share of the national income to those who have the lowest incomes.

IMPROVING URBAN OPPORTUNITIES FOR RECREATION, EDUCATION, AND CULTURE

Increasing Leisure. The cutting down of the hours of work in the United States has left an increasingly large part of each day and of each week available for recreation. The decrease of child labor has made it possible for more children to participate in healthful activities. How are we to organize for increased leisure? The modern forms of organized recreation are of two kinds: first, such indoor activities as motion pictures, concerts, theatrical presentations, and dancing; and second, recreation which takes people out of doors for the exercise of mind and body. For city people outdoor activity during leisure hours is obviously preferable.

Public Parks. The organized development of outdoor recreation has gone farther than many people realize. Municipal and state authorities and even the federal Government have established free public parks where people may go for play. In national and state parks people may even camp for an entire summer season if they wish.

⁵ *Ibid.*, p. 227.

to do so. During 1929 admissions to the national parks ran to nearly 2,500,000.

THE NATIONAL PARKS

<i>National Parks in Order of Creation</i>	<i>Location</i>	<i>Area in Sq. Mi.</i>	<i>Distinctive Characteristics</i>
Hot Springs, 1832	Middle Arkansas	1 $\frac{1}{4}$	46 hot springs possessing curative properties
Yellowstone, 1872	Northwestern Wyoming	3,348	Geysers; boiling springs; mud volcanoes; petrified forests; Grand Canyon of the Yellowstone
Sequoia, 1890	Middle eastern California	252	12,000 sequoia trees over 10 ft. in diameter, some 25 to 36 ft. in diameter; cave
Yosemite, 1890	Middle eastern California	1,125	Valley of world-famed beauty; lofty cliffs; many waterfalls of extraordinary height; 3 groves of big trees
General Grant, 1890	Middle eastern California	4	Created to preserve General Grant tree, 35 ft. in diameter
Mount Rainier, 1899	West central Washington	324	28 glaciers; 48 sq. miles of glacier, 50 to 500 ft. thick
Crater Lake, 1902	Southwestern Oregon	249	Lake of extraordinary blue in crater of extinct volcano; sides 1,000 ft. high; lava; fishing
Wind Cave, 1903	South Dakota	17	Miles of galleries and chambers containing peculiar formation
Platt, 1904	Southern Oklahoma	1 $\frac{1}{8}$	Many sulphur and other springs possessing medicinal value
Sully's Hill, 1904	North Dakota	1 $\frac{1}{8}$	An important wild-animal preserve
Mesa Verde, 1906	Southwestern Colorado	77	Most notable, best-preserved prehistoric cliff dwellings
Glacier, 1910	Northwestern Montana	1,534	250 glacier-fed lakes; 60 small glaciers; precipices thousands of feet deep
Rocky Mountain	North middle Colorado	397 $\frac{1}{2}$	Heart of Rockies; snowy range, peaks 11,000 to 14,255 ft. altitude
Hawaii, 1916	Hawaii	186	Kilauea and Mauna Loa on Hawaii. Haleakala on Maui
Lassen Volcano, 1916	Northern California	124	Only active volcano in the United States proper; hot springs; mud geysers

THE NATIONAL PARKS (*Continued*)

<i>National Parks in Order of Creation</i>	<i>Location</i>	<i>Area in Sq. Mi.</i>	<i>Distinctive Characteristics</i>
Mount McKinley, 1917	South central Alaska	2,645	Highest mountain in North America
Grand Canyon, 1919	North central Arizona	958	Greatest example of erosion in the world
Lafayette, 1919	Maine Coast	8	Group of granite mountains on Mt. Desert Island
Zion, 1919	Southwestern Utah	120	Zion Canyon 800 to 2,000 ft. deep
Bryce Canyon, 1928	Southwestern Utah	22	Eroded pinnacles, vivid colorings
Grand Teton, 1929	Northwestern Wyoming	150	Spectacular Teton Mountains

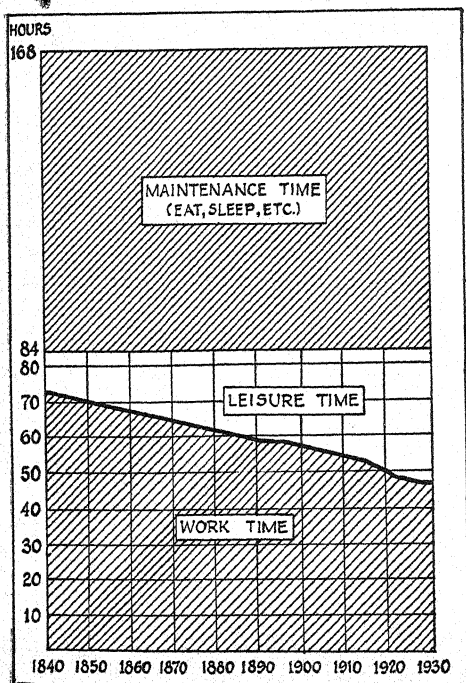
Most national and state parks are open only during the summer months, and most workers have only short periods of time in which to visit them. For such people the most important developments are parks which lie close to their homes. Municipal playgrounds are an important item. During 1921, for instance, nearly \$9,000,000 was spent by 458 cities to maintain playgrounds and recreation centers. In addition, more than \$5,000,000 was voted in bond issues for recreational purposes. A daily attendance of more than 1,000,000 children is reported by 407 of these cities.

Playgrounds are of course of the greatest importance to children. But cities are not overlooking the development for adults of such outdoor activities as golf and tennis. For example, Chicago in a single year issued more than 1,000,000 tickets for golf alone and the starters in the park reported that several times that number would have been issued had there been sufficient room for the players.

From the foregoing facts it appears that an economic system which has driven its workers indoors for the most part is also beginning to provide facilities outdoors for maintaining physical and mental fitness. Many firms provide outdoor recreation for their employees, finding that it pays in many ways to develop athletic fields and other recreational centers.

Education's Function in an Industrial Society. Education has a special function in an industrial society which it did not have in any society that has gone before. Its purpose is not purely to develop

culture or a genteel attitude toward life. What modern education tries to do is to adapt children to life, not forgetting, however, that education ought to build toward a better future as well as to provide for present needs.



Rising standards of living have been accompanied by increasing time for recreation. It is still necessary to provide proper recreative facilities and to educate people in their proper use. (Adapted from *The New York Times*, August 9, 1931.)

ent civilization until they reach the point where they are sufficiently informed to make their own contributions to social progress.

Intellectual and Esthetic Standards. Before industrialism, standards of the beautiful entered into most aspects of life. Even the humblest furniture of Colonial America had a beauty as distinctive as that produced by master craftsmen of the time in England. The present generation of Americans is constantly reminded of the beauties of the houses and public buildings of its ancestors.

A person examining the school system of today might be discouraged concerning the way schools are building for the future. He might feel that education is too largely devoted to training in the technique of industry as it exists at the present time. But education which does not meet existing needs lacks the vitality necessary for its continued existence. In the long run people will not tolerate training that fits for a life they never find. Education must start with the materials of today. Therefore the trend of modern education is to equip young people with an understanding of our present

But we misunderstand the nature of beauty in life when we merely copy the old Colonial houses and their furnishings, suitable for their day but too often unfit for our own. When we try to make a suburban residence look like a seventeenth-century farmhouse or a skyscraper take the form of a medieval cathedral, we confess ourselves esthetically bankrupt and without standards of our own. It is a sad truth that esthetic ingenuity has not kept pace with industry. But as industrialism comes of age, we shall create new standards of beauty, which will fitly express the inner meaning of an industrial society. The new architecture of mass, impressionistic painting, and new poetic forms point the way.

As we progress we see that it is not enough to develop a material culture, to eliminate poverty, and to make efficient factories. Not only must life become more comfortable for the body, but the world must be made a place in which the spirit can find itself at home. Our educational system must give increased attention to this need. And progress is being made. Not many years ago we had few if any institutions devoted to the fine arts, but now we have schools of architecture, music, and painting; libraries and museums in many communities; and we support more than fifty symphony orchestras and hundreds of choral societies and concert organizations.

But improvement is not confined to the arts. Other channels of intellectual advance have also been established, especially in the sciences. Our industrial society is gradually learning to sustain and encourage such pursuits, not merely as aids to the economic system but as ends of life. It is beginning also to recognize that ability in such activities is the rarest and most precious possession of mankind.

LIMITATIONS TO MAKING LIVING CONDITIONS MORE SATISFYING

Poverty. Unfortunately most of the improvements discussed above affect only those people who live on the level of comfort or riches. And we must remember the figures stressed in Chapters IV and V, showing the extent of poverty. For over one-third of our population, poverty-stricken even during prosperous times, there is little hope for cultural advantages until their incomes rise into the comfort level.

Effect of Depressions. Here again we must remember that a serious depression wipes out the gains of decades. After 1929 thou-

sands of farm families had to stop driving to the city or indulging in community festivities. State appropriations making possible the consolidation of schools and the employment of capable teachers had to be reduced. Levels of living all along the line suffered a tremendous setback. In the cities the change is even more striking. The open spaces which existed to provide romping-space are in certain instances used for sleeping and living. The city and state appropriations which went toward social betterment have gone for relief, and even for such purposes there is a shortage of funds. Misery and want multiply on all sides. An economist who fell asleep in the middle of 1929 and awoke in the winter of 1933 would feel like Gulliver transported suddenly to Lilliput.

SUMMARY

Better living-conditions, as well as better working-surroundings, promote efficiency. On the farm the isolation of rural life is disappearing owing to the growth of county-wide social life and better means of communication with the city. Education, recreation, and culture have all gained from contacts with the outside world. Health has improved with the coming of a more varied diet and better facilities for medical care.

In the city too improvements have taken place. But planning to avoid congestion and to improve housing has just begun. Adequate medical care is still lacking to many who need it. Social insurance in the form of old-age pensions and workmen's compensation legislation has provided the basis for protection from infirmity, but it represents only beginnings. Outdoor recreation must be stimulated by the multiplication of parks and playgrounds. Education must meet vocational needs and at the same time provide for cultural development, which is no less important than material welfare.

Improvements that have been made so far chiefly affect people on the comfort or the riches level. Those in poverty, one-third of our population even in good times, must wait for the raising of their incomes into the comfort class. Several years of serious depression destroy the gains of decades, and change society's problem from one of improvement to one of survival.

QUESTIONS AND PROBLEMS

1. What is probably the main difference between the life of a farm family in Europe and the life of a farm family in the United States? What difficult

problem in American farm life is caused by the difference referred to? Mention improvements in recent years that have helped to solve the problem.

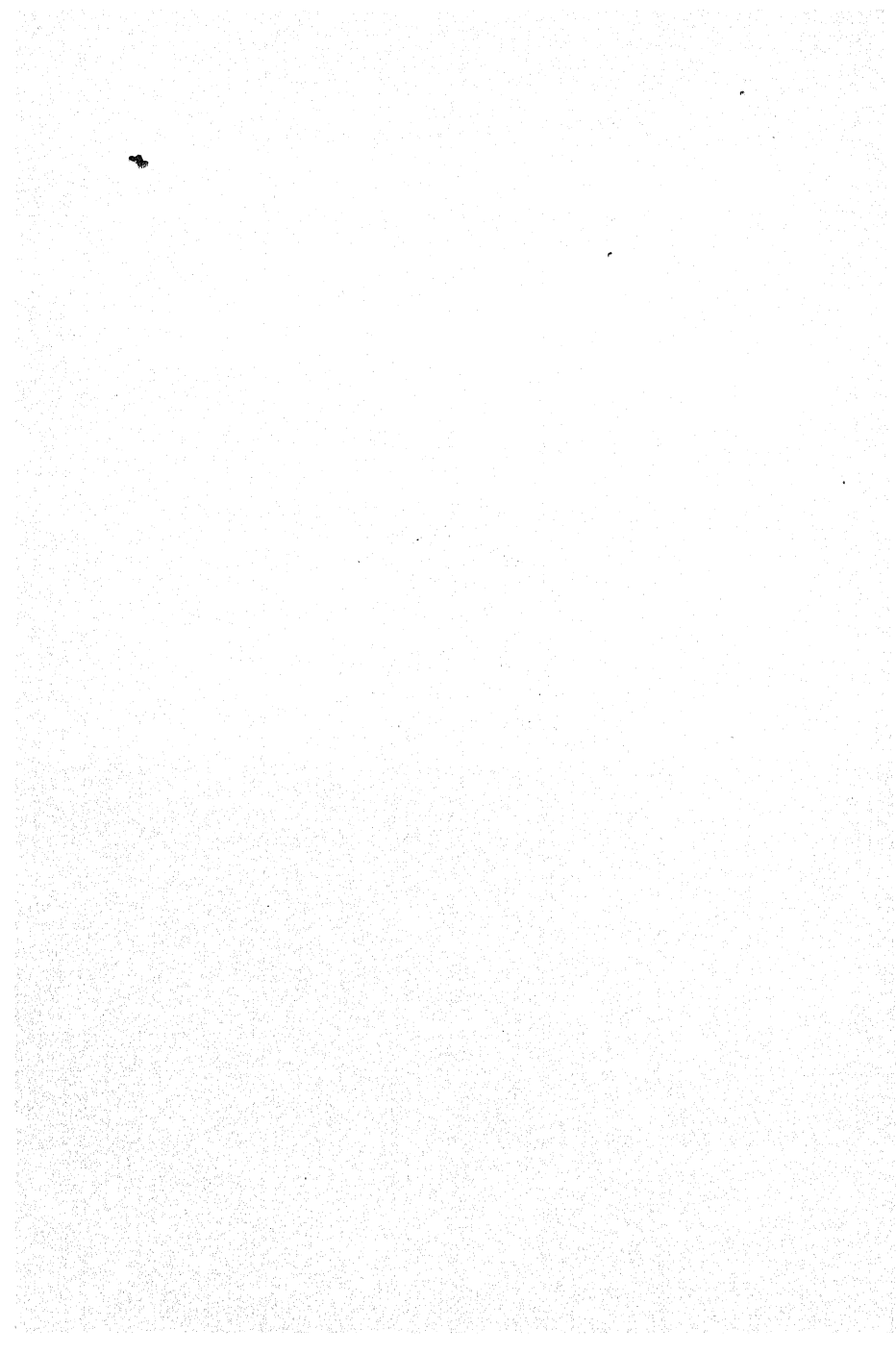
2. List ways in which the automobile and hard roads have affected farm life in the United States. Mark with a star (*) the ways in which the automobile has bettered farm life. Has it injured farm life in any way? Be prepared to give reasons for your conclusions.
3. What do we mean when we say that the city and the country are interdependent? What evidences have we of this trend?
4. Point out ways in which rural life has improved during recent years in diet and sanitation. What further improvements in these matters are still greatly needed?
5. Mention three improvements in education that have occurred in progressive rural communities during the last fifty years. What additional changes seem to be most needed? Suggest ways by which your proposals might be brought about.
6. Describe the facilities for recreation in a rural community in which you have lived or visited. To what extent do the people in the vicinity seem to make use of the existing facilities? What further provisions for recreation are needed?
7. Explain the favorable results of the increased contacts that now exist between most rural communities and the outside world. Mention the unfavorable results. Viewed as a whole, do the results of the increased contacts impress you as desirable or undesirable? Give reasons.
8. In your judgment what has been the greatest improvement during recent years in the rural standard of living? What was the chief factor in bringing about the improvement you mention? What single improvement do you think would do most to raise the living level in most rural communities? Suggest ways by which the improvement might be accomplished.
9. What is most attractive to you in rural life? What is least attractive? Illustrate your answers to these questions by examples from rural communities you have visited.
10. List the main elements that enter into a desirable standard of living in addition to health, education, and recreation. Which do you consider the most important? Give reasons.
11. Name the chief dangers to health in a city. Point out the dangers that can be dealt with only by government in contrast with those that are primarily under the control of the individual. Give reasons for your conclusions.
12. What does the report of the Committee on the Costs of Medical Care indicate in regard to the economic organization of medicine? What remedies does it suggest?

13. What is city-planning? Tell what it includes. How would proper city-planning improve living-levels?
14. If your community has a plan, describe its main features, calling attention in particular to the work that remains to be done. If your community has no plan, sketch one that would provide for adequate streets, an industrial section, residence districts, park system, business region, and a civic center.
15. Tell how the character of a person's work should affect his diet. Suggest a suitable diet (a) for a young man engaged in office work and (b) for a young woman working as a sales clerk in a department store.
16. Visit an up-to-date factory in your community and note the facilities it contains for safeguarding the health of the employees. List any additional safeguards that may be needed.
17. What is social legislation? Why is it so called? Explain the main theory that underlies such laws.
18. Find out if your state has a workmen's compensation law or an employer's liability law. If so, give its main provisions. Discover one state which seems to have a better compensation law and one which appears to have a worse compensation law than your own state.
19. Are workmen's compensation laws advantageous to employers? Give reasons.
20. *Question for debate: Resolved, That our state should provide by statute for old-age pensions to be financed by equal contributions by the worker, the employer, and the state.*
21. How has the introduction of machinery in industry affected the need for recreation facilities? Explain.
22. Describe (a) the outdoor and (b) the indoor facilities for recreation in your community. Mention other means of recreation that are needed and suggest ways by which such needs might be met.
23. What new responsibilities and opportunities came to the school as a result of the Industrial Revolution? Mention ways in which the schools in your community meet such obligations. Suggest additional services they might render.
24. Explain one intellectual or esthetic development that is greatly needed in your community to improve the levels of living of the workers.
25. Explain the relation between the improvement of living-conditions and the promotion of productive efficiency. Give illustrations of your ideas.
26. What effect has a depression upon achieved gains in social life?

READINGS IN THE CLASS LIBRARY

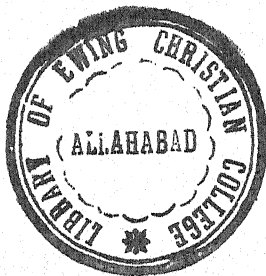
- *1. "Rural Conveniences," Hart, *Twentieth Century United States*, pp. 22-25.
2. "Rural Free Delivery," M. B. Thrasher, *ibid.*, pp. 261-64.

3. "The Wizardry of the Automobile," A. D. Albert, *ibid.*, pp. 268-71.
4. "Road Improvement," T. W. Allen, *ibid.*, pp. 271-75.
5. "Workman's Compensation," E. H. Downey, *ibid.*, pp. 482-86.
6. "Beautifying the Nation," Edward Bok, *ibid.*, pp. 571-75.
- *7. "Health Work and Safety Engineering," Marshall and Wiese, *Modern Business*, pp. 194-200.
8. "Pensions for Poor Mothers," Forman, *Sidelights on Our Social and Economic History*, pp. 496-98.
9. "Gains Labor Has Made and How," Hayward and Johnson, *The Story of Man's Work*, pp. 217-22.
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- *13. "Harvesting the Crops," David Grayson, *ibid.*, pp. 305-08.
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- *15. "Social Insurance," Patterson and Scholz, *Economic Problems of Modern Life*, pp. 484-98.
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- *20. "The Overflowing Energy of Mankind," Wells, *The Work, Wealth and Happiness of Mankind*, Vol. II, pp. 753-84.



Part Four

RAISING THE LEVELS OF LIVING BY IMPROVING THE CONDUCT OF BUSINESS AFFAIRS



Looking Backward—and Forward

PART ONE of this volume introduced the problem of levels of living. We found that in modern times people desire to know how the world, or at least their own nation, lives and what may be done to make a better economic life possible.

Part Two analyzed American levels of living. We found that general progress had been made, but that even in times of prosperity millions

live in the chill of poverty, and that when depressions come probably half of our population is reduced to want. At this point we asked why poverty exists and what may be done to remedy it.

In Part Three we saw that the first step toward raising all levels of living is increasing the production of goods. The United States has been most fortunate in this respect, for the rate of increase has doubled our wealth every thirty years. Although agriculture has lagged somewhat, it too has illimitable possibilities. Great as our past achievements have been, we may in the future improve production in every field of activity by the more effective use of fuel, machinery, land, and—most important of all—human lives. There must be a satisfactory reconciliation between the need to increase goods and the need to conserve men.

Now we are to consider a different problem, for production alone cannot raise levels of living. In the old days when people knew little about the mechanical arts, certain leaders declared that such knowledge would bring wealth to everyone. But, as we have seen, they were mistaken. During prosperity, although people are better off than at other times, poverty continues. And when depressions come people suffer from want even though machines are better than ever and men are as willing and as able to work as during times of prosperity. This paradox of progress in the means of producing wealth accompanied by occasional lowering of levels of living (such as we witnessed after 1929) was described vividly years ago by Henry George in his great book, *Progress and Poverty*:

The present [nineteenth] century has been marked by a prodigious increase in wealth-producing power. The utilization of steam and electricity, the introduction of improved processes and labor-saving machinery, the greater subdivision and grander scale of production, the wonderful facilitation of exchanges, have multiplied enormously the effectiveness of labor.

At the beginning of this marvelous era it was natural to expect, and it was expected, that labor-saving inventions would lighten the toil and improve the condition of the laborer; that the enormous increase in the power of producing wealth would make real poverty a thing of the past. Could a man of the last century—a Franklin or a Priestley—have seen, in a vision of the future, the steamship taking the place of the sailing vessel, the railroad train of the wagon, the reaping machine of the scythe, the threshing machine of the flail; could he have heard the throb of the engines that in obedience to human will, and for the satisfaction of human desire, exert a power greater than that of all the men and all the beasts of burden of the earth combined . . .; could he have

conceived of the hundred thousand improvements which these only suggest, what would he have inferred as to the social condition of mankind?

It would not have seemed like an inference; further than the vision went it would have seemed as though he saw; and his heart would have leaped and his nerves would have thrilled, as one who from a height beholds just ahead of the thirst-stricken caravan the living gleam of rustling woods and the glint of laughing waters. Plainly, in the sight of the imagination, he would have beheld these new forces elevating society from its very foundations, lifting the very poorest above the possibility of want, exempting the very lowest from anxiety for the material needs of life; he would have seen these slaves of the lamp of knowledge taking on themselves the traditional curse, these muscles of iron and sinews of steel making the poorest laborer's life a holiday, in which every high quality and noble impulse could have scope to grow.

And out of these bounteous material conditions he would have seen arising, as necessary sequences, moral conditions realizing the golden age of which mankind have always dreamed. Youth no longer stunted and starved; age no longer harried by avarice; the child at play with the tiger; the man with the muck-rake drinking in the glory of the stars! Foul things fled, fierce things tame; discord turned to harmony! For how could there be greed where all had enough? How could the vice, the crime, the ignorance, the brutality, that spring from poverty and the fear of poverty, exist where poverty had vanished? Who should crouch where all were freemen; who oppress where all were peers? . . .

It is true that disappointment has followed disappointment, and that discovery upon discovery, and invention after invention, have neither lessened the toil of those who most need respite, nor brought plenty to the poor. . . . From all parts of the civilized world come complaints of industrial depression; of labor condemned to involuntary idleness; of capital massed and wasting; of pecuniary distress among business men; of want and suffering and anxiety among the working classes. All the dull, deadening pain, all the keen, maddening anguish, that to great masses of men are involved in the words "hard times," afflict the world to-day. This state of things, common to communities differing so widely in situation, in political institutions, in fiscal and financial systems, in density of population and in social organization, can hardly be accounted for by local causes. There is distress where large standing armies are maintained, but there is also distress where the standing armies are nominal; there is distress where protective tariffs stupidly and wastefully hamper trade, but there is also distress where trade is nearly free; there is distress where autocratic government yet prevails, but there is also distress where political power is wholly in the hands of the people; in countries where paper is money, and in countries where gold and silver are the only currency. . . .

This association of poverty with progress is the great enigma of our times.

It is the central fact from which spring industrial, social, and political difficulties that perplex the world, and with which statesmanship and philanthropy and education grapple in vain.

Henry George offered as a remedy for existing evils the single tax. Although few people today accept his remedy, we should try to grasp, as he did, the need of doing other things than producing more wealth, if we wish to raise levels of living. In addition to making goods, we must organize economic affairs so as to distribute goods more effectively and use them more wisely.

Chapter 13

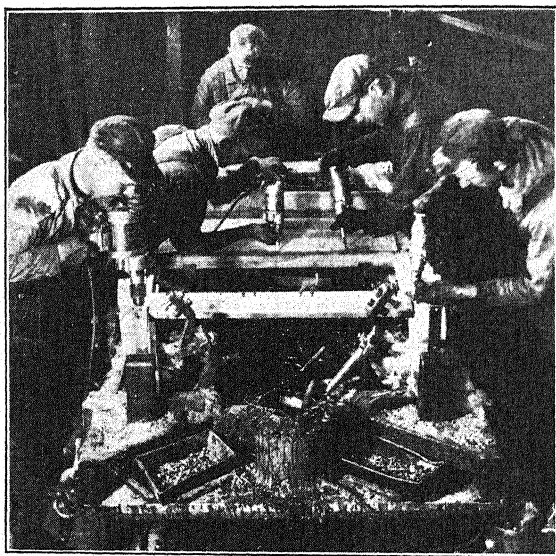
THE ORGANIZATION OF BUSINESS

INCREASE IN THE SIZE OF BUSINESS UNITS

Advantages of Large Business Units. One important way to eliminate waste and to direct all energy so as to meet human needs more adequately is to establish the most efficient industrial organization possible. In recent years large business units seem to be the most satisfactory organizations for several reasons. Since many of the costs of keeping up a factory continue even when the machinery is idle, it is wise to have production concentrated in plants doing enough business to enable them to keep going most of the time. A second advantage of the large plant is that it facilitates the minute specialization of labor. Each worker can make at great speed a tiny standardized part of a product; at the same time the workers are so close together that the several parts can readily be assembled and made into the completed article. Similarly, the different types of workers are so close together that a single management can supervise them all and coördinate their varied activities. Moreover, a large plant can eliminate waste by making by-products out of left-over materials. In addition it can employ capable executives and undertake industrial and scientific research. Finally, big business, whether concentrated in one plant or not, has great power in the market. It can obtain low prices by buying in large quantities; it is less dependent upon the favor of special customers; it finds that banks are eager to extend credit. Big business may also secure high prices for its products by unfair competition.

On the whole, large-scale units have proved more efficient than the smaller units of the past. And where superior efficiency and greater

economy exist, government regulation can be employed to secure its benefits to the public and to escape the evils that sometimes come from the power of big business.



Working on body frames in a large automobile plant. Three distinct operations are being performed, yet each workman is confined to a single task. The frames move on a belt or chain from one workman to another. (Courtesy Olds Motor Works.)

How Business Becomes Big. There are many ways in which business may become big. A small unit may grow large through the luck or the ability of its directors. This method needs no description or example. A second method of growth is the combination of a number of plants, not necessarily large, under a single management; thus, the Great Atlantic and Pacific Tea Company has over 10,000 small stores. A third way of growth is by integration, that is, the unification of plants performing successive steps in a large productive process. For example, the International Harvester Company makes agricultural implements; it manufactures the steel and lumber used in its products; and it produces the coal with which to make the steel. Finally, a business may grow by combining under a single manage-

INCREASE IN THE SIZE OF BUSINESS UNITS 251

ment the making of different commodities. The great meat-packers of Chicago, for example, have added butter, eggs, cheese, and poultry to their list of products.

Extent of Growth in Size of Business Units. Although it is impossible to get really adequate statistics regarding the size of business, we know that the era since 1900 has been an age of big business. In the decade 1920-29 the growth of large business units spurred. The following table is illustrative.

TABLE 27
THE EXTENT OF MERGERS, 1919-1930 ¹

Year	Manufacturing and Mining				Public Utilities	Banking
	Number of Mergers Recorded	Number of Concerns Merged	Number of Concerns Acquired	Net Number of Concerns Disappearing	Number of Firms Disappearing	Number of Mergers
1919	89	222	235	438	22	80
1920	173	474	459	760	15	77
1921	89	373	203	487	74	104
1922	67	220	156	309	285	125
1923	67	218	160	311	426	120
1924	95	263	200	368	580	124
1925	121	333	342	554	402	120
1926	139	597	398	856	1,029	154
1927	207	678	399	870	911	259
1928	221	687	572	1,058	585†	...
1929	...	...	...	1,245	...	...
1930	...	...	...	747*	...	...
Total	1,268	4,135	3,124	6,011	4,329	1,793

* Estimated after December 10, 1930.

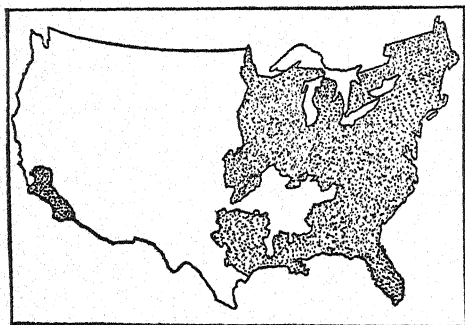
† First six months.

New Lines of Combination. In former days the movement toward business combination was chiefly confined to such industries as oil, steel, and packing plants, and to public utilities. Since the World War, however, there has been great activity in two newer fields, retail trade and banking. This new type of combination creates new social problems, because its main strength is not in increased produc-

¹ Adapted from *Recent Social Trends*, Vol. I, p. 241.

tive efficiency, but in superior bargaining power. It brings under unified control a huge number of small plants which retain their small size in dealing with the public over widely scattered areas. This new line of combination is a strong manifestation of the growing centralization of the *control*, if not of the ownership, of wealth.

Chain Stores. Combination in retail trade is shown clearly by the growth of chain stores. These stores have gone into small towns and at times have proved disastrous to the older independent business establishments. Their opponents claim that the chain stores



1916 44 ■

1932 1008 ■

The dotted area represents the part of the United States served by A. and P. chain grocery stores. The black bars represent their sales in millions of dollars.

do not bear their share of the cost of local government and improvements, that they do not help to build local industry and banking or employ local help, that they sell cheaper for cash, but force the local dealers to bear all the expense of crediting because the local tradesmen cannot without self-injury change their long-established crediting practices. The chain stores reply that the local dealers are old-fashioned, inefficient, and

wasteful, and that the chain stores sell better goods for less money. Much may be said on both sides, but we need only note that the chain stores are apparently here to stay, and that they represent a new type of consolidation, achieving success more through their power to buy cheaply than through their ability to reduce actual production costs. They represent a change in business organization rather than in productive technique, whereas most of the older combinations manifested both sorts of changes.

During recent years the trend has been toward a steady increase in the number of chain stores. In a few instances, the volume of their business exceeds that of the older independent establishments.

TABLE 28

SHARE OF TOTAL RETAIL BUSINESS DONE BY CHAIN STORES, 1929² *

<i>Type of Business</i>	<i>Chain Store Percentage of Total Stores</i>	<i>Chain Store Percentage of Total Sales</i>
Food	12	27
Drug	6	19
Tobacco	10	30
Variety	47	93
Apparel	15	27
Department and dry goods	8	14
General merchandise	21	26
Furniture	4	14
Musical instruments	4	15
Hardware	2	4

Combinations in Banking. Centralized control of banking is another recent development. Like the chain store, it represents combination with a new aim and a new sort of power, not based primarily upon productive superiority. This increased economic power may be advantageous in itself, but it presents new problems requiring new social controls, and a new attitude toward industry, par-

TABLE 29

BANK BRANCH SYSTEMS AND BRANCHES IN THE
UNITED STATES, 1922-1931³

<i>Year</i>	<i>Number of Banks with Branches</i>	<i>Total Branches</i>
1922	610	1,800
1923	671	2,054
1924	706	2,299
1925	719	2,525
1926	742	2,701
1927	738	2,912
1928	773	3,135
1929	763	3,350
1930	749	3,516
1931	722	3,463

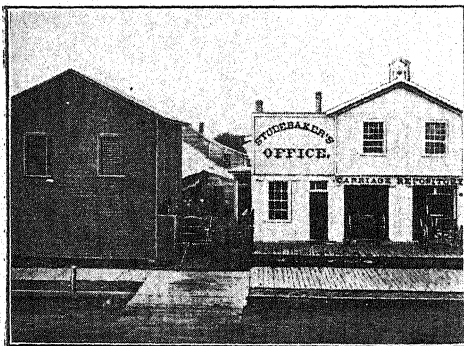
² Adapted from *ibid.*, p. 242.³ Adapted from *ibid.*, p. 244.

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ticularly toward the relationships between industry, banking, and government. In 1931 the largest bank failure in American history tied up for several years the savings of 200,000 small depositors. In 1932 the heads of two banks dictated to New York City the policy to be followed in framing its annual budget—a policy vitally affecting the entire city in a time of unusual stress and strain.

MODERN BUSINESS ORGANIZATION AND THE ADVANTAGES OF THE CORPORATE FORM

Entrepreneurs and Small Business Men. The entrepreneur is the person who borrows capital, pays interest for it, buys or rents a site,



The name Studebaker once stood for a local carriage and wagon works operated by an entrepreneur. (Courtesy Studebaker Corporation of America.)

builds a plant, installs machinery, hires labor, purchases raw materials, supervises the operation of the plant, and sells the product. Although it is perhaps true that this is the age of the corporation and that the day of the small business man is past, many small business men are still left. They carry on much of the retail business of the country, especially in the small towns, and operate what remains of the handicraft industries, particularly in such lines as fine furniture and clothing. They are, of course, much less common than in the early years of the industrial system, but the business man of today who begins with a small capital and builds up a business of his own is the kind of individual who played such an important part in starting the Industrial Revolution by hiring a few hands, furnishing them with raw materials and a place in which to work, and then disposing of the product of their labor. He pays the workers their wages and meets the other expenses of the business; what is left over is his profit. When he brings about great efficiency by introducing machinery or developing new processes, or when he

is especially fortunate in the market, he makes large profits, builds up a big business, and becomes what we sometimes call a great entrepreneur. Many important business concerns have been built up by such individuals. They are still not unknown even in our highly developed system of enterprise.

A one-man business may become large and complex, with all its subdivisions ruled from the top. The career of the self-made man is often romantic and intensely interesting,⁴ but he belongs principally to a past day. Indeed, the business which he built generally tends to adopt some other form when its originator dies or when it becomes too complex for even the greatest genius to manage alone. This is one of the reasons why joint ownership has become the typical modern form of industrial organization.

Partnership. In the course of time several different devices have been developed to provide joint ownership. Prominent among them have been the partnership and the corporation. The partnership has proved well suited to certain restricted areas of business, such as the joint practice of a profession. Law firms are often partnerships, and physicians often unite their efforts by the same device.

The partnership, however, has defects that make it unsuited to the larger field of manufacturing and commerce. It does not provide for a limitation of the liability, or risk, of the owners (partners). If X invests \$5,000 in a partnership which has assets of \$500,000, and the business fails to the extent of \$100,000, all the property owned by X, whether it has anything to do with the partnership or not, is subject under the law to the payment of the debt. Few men care to risk so much in an investment, and thus it is hard for the partnership form of organization to attract capital. In addition, the legal rights of partners are such that a partnership becomes hard to manage when there are many members. Finally, most partnerships are terminated by the death of one member.

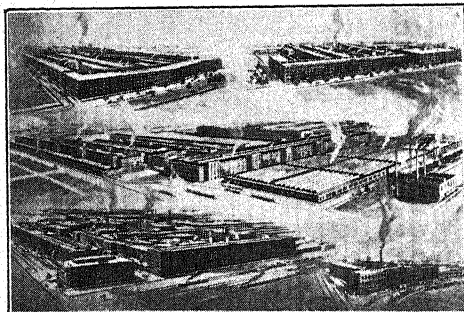
The Corporation: A Legal Person. The corporation has gradually become the chief form of business organization in our industrial system, producing over 90 per cent of all manufactured goods in the United States. It affords people an opportunity to make small investments without great risk, thus enabling large amounts of capital owned by thousands of people to be brought under a single manage-

⁴See, for instance, the *Life of Robert Owen*, by himself, or Garet Garrett's *The Driver*. Witness also the career of Henry Ford.

ment. Unlike the partnership, it is not difficult to control when there are many owners.

How does a corporation secure these advantages? Chiefly by the legal device which makes a corporation a *legal personality* distinct from its owners. Since the corporation is a legal entity, debts contracted by the corporation are not the debts of its owners except in so far as they have put money into the business. If X invests \$5,000 in a \$500,000 industrial corporation, and it fails to the extent of \$100,000, X can

lose no more than the money he has invested in its stock.



The name Studebaker now stands for a corporate organization which controls an automobile business with a number of large plants and world-wide distribution. (Courtesy Studebaker Corporation of America.)

The corporation (corporate person) may buy and sell, make contracts, inherit property, sue and be sued, and do many other things. A partnership has no separate entity, and therefore whenever it wants to sue, for example, all the partners must join the suit, for there is no partnership

distinct from the partners. It is easy to see the advantages of a corporate organization which can act for itself through its officers and directors, instead of having to bring in thousands of owners (stockholders). A corporation, of course, does not terminate with the death of any or all the stockholders.

Corporation Charter. A corporation is the creature of a state. A corporation charter is granted whenever a group of persons (usually a minimum of three) apply in the manner and according to the terms set forth in law. Therefore, although an individual may do anything not forbidden by law or public policy, a corporation may do only those things which its charter authorizes it to do. Of course a charter may be phrased in such broad terms that one would find it hard to imagine an act not so included; but the acts of the directors or officers of a corporation may be challenged by a stockholder or by the public authorities on the ground that such acts are unau-

thorized, and in any dispute the power which the corporation seeks to exercise must be shown to exist expressly or by necessary implication in the charter.

Rights of Corporations in Commerce. A natural person may engage in legitimate business anywhere in the United States, and no state has the right to exclude him. Likewise a partnership, being nothing more than a group of natural persons, may do business anywhere. But a corporation, being the mere creature of the state granting its charter, cannot do business in any other state without complying with the corporation laws of that state and obtaining its permission.

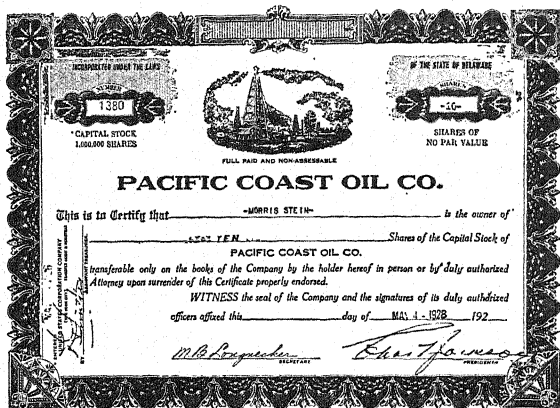
When a corporation is engaged in interstate commerce, however, it may do such business in any state without satisfying that state's corporation requirements, for no state can interfere with interstate trade. This has given many corporations great freedom, because interstate commerce is so expansive and because it is so difficult to separate local business from interstate business when the corporation does both. For this reason, too, corporations tend to seek to obtain their charters in the state with the most liberal laws. Recently the Supreme Court has tended to recognize the hardship the interstate-commerce provision inflicts on states seeking to regulate business for the public good, and has decreed that a state may impose "reasonable" burdens on interstate commerce. This makes the question one of degree, but there seems to be no other way out.

THE FINANCIAL STRUCTURE OF THE MODERN CORPORATION

Simplest Financial Structure: One Type of Security. The simplest financial structure for a corporation is that which was used by the joint-stock companies of the seventeenth century and which is to be found in many small corporations today. In this type of corporation one kind of security represents the entire capital investment. If, for example, the corporation issues one thousand shares of capital stock, each share of stock represents ownership of one-thousandth part of the entire enterprise, and the right to receive one-thousandth part of the annual dividend.

Development of Stocks and Bonds. From a simple beginning, two main incentives developed the highly complex structure of many

corporations of today. The first has been the desire of the corporate promoters to create types of securities that will suit different kinds of investors, thereby securing larger amounts of capital. The second has been the desire to obtain the vast sums required in many industrial enterprises, and at the same time to retain the control of the management in the hands of a small group. Corporate securities are of two main kinds—stocks and bonds. The stockholders are the legal owners of the enterprise and therefore in theory have entire



A typical stock certificate.

control of the management. The bondholders are creditors and, under ordinary circumstances, do not have a voice in the management.

Rights of Bondholders: Priorities. Bonds are issued to attract capital from investors who desire to obtain the greatest degree of security and, for that security, are willing to accept a relatively small return. Since the bondholder is a creditor, he does not buy a share of ownership in the business, but merely lends his capital to the corporation, usually for a definite period of years. The chief protection of bondholders is the so-called priority of their claims against both the assets and the earnings of the corporation. Before any dividends can be paid to stockholders, interest must be paid in full to bondholders. Stockholders as owners receive profits, but there are no profits until there is a surplus above fixed charges, or expenses, of

which interest payments to creditors are a part. If a corporation goes out of business, the claims of the bondholders must be paid in full before there is any division of assets among the stockholders.

As long as interest is paid regularly, the bondholders have no voice in the management of the concern. If the corporation defaults in its interest payments, and the proper court decides that the default is sufficiently serious, the court may give the bondholders the

BOND SALES ON THE NEW YORK STOCK EXCHANGE

SATURDAY, OCTOBER 14, 1933.

	U. S. Govt.	Domestic.	Foreign.	Total All.	Year to Date.	U. S. Govt.	Domestic.	Foreign.	Total All.
Day's sales.....	\$634,900	\$3,493,000	\$1,661,000	\$5,088,900	1933	\$342,315,800	\$1,656,291,500	\$599,472,500	\$2,637,299,200
Friday	1,298,500	8,188,000	2,898,000	11,084,500	1932	597,055,800	1,564,755,000	692,021,500	2,473,831,100
Year ago.....	293,000	3,022,000	1,602,000	4,917,000	1931	173,851,550	1,489,948,700	716,908,600	2,370,708,850
Two years ago..	877,000	4,310,000	2,461,000	7,648,000	1930	89,936,500	1,555,060,500	584,548,900	2,227,546,200

UNITED STATES GOVERNMENT LOANS

Range Since Date of Issue.		Range, 1933.		Sales in		Issue.		Open.		High.		Low.		Net		Closing.	
High.	Date.	Low.	Date.	High.	Low.	1,000s.											
103.20	Jan. 25, 1933	99 1/2	June 2, 1933	102.50	99.30	7	Liberty 3 1/2s, 1932-47.....	102.18	102.16	102.16	102.16	102.16	102.16	102.16	102.16	102.16	102.16
102.4	Oct. 13, 1933	101.30	Oct. 14, 1933	102.4	101.30	70 1/2	Lib. 4th 4 1/2s, '33-38, called, reg.	101.30	102.2	101.30	101.31	101.31	101.31	101.31	101.31	101.31	101.31
101.29	Oct. 13, 1933	101.28	Oct. 14, 1933	101.29	101.28	4	Lib. 4th 4 1/2s, called, reg.	101.28	101.28	101.28	101.28	101.28	101.28	101.28	101.28	101.28	101.28
103.30	Mar. 9, 1937	81.00	May 21, 1939	103.4	90.28	15	Liberty 1st cv 4 1/2s, '35-47.	102.28	102.31	102.28	102.31	102.31	102.31	102.31	102.31	102.31	102.31
103.5	May 19, 1931	82.00	May 20, 1939	103.30	100.12	82 1/2	Liberty 4th 4 1/2s, 1933-38.....	103.22	103.23	103.21	103.21	103.21	103.21	103.21	103.21	103.21	103.21
105.60	May 19, 1931	82.15	May 20, 1939	103.24	100.8	16	Liberty 4th 4 1/2s, reg.....	103.19	103.19	103.19	103.19	103.19	103.19	103.19	103.19	103.19	103.19
116.6	Jan. 7, 1928	98 1/2	Mar. 27, 1923	111.4	103.14	35		110.40	110.4	110.00	110.5	110.5	110.5	110.5	110.5	110.5	110.5
118.15	Dec. 27, 1927																

This is an excerpt from the daily list of bond prices traded on the New York Stock Exchange. (From *The New York Times*, October 15, 1933.)

power to take entire control of the enterprise. They may then either sell the assets to satisfy their claims or else reorganize the company under a new management.

Bonds are usually classified as first, second, or third mortgage bonds in accordance with the priority of their claims against the assets and earnings of the corporation. The first mortgage bonds, having the first claim, are the safest and therefore receive the lowest interest. Of course, *all* bondholders come in ahead of the stockholders.

Rights of Stockholders. The stockholders are the legal owners of the corporation; in theory they therefore have complete control of the management. They lose this right only when the corporation is unable to meet the claims of its creditors and in consequence is seized for the benefit of the latter. In the control of the management an almost universal rule is that each share of stock has one vote, and that a bare majority of stock, or votes, holds the power of making all corporate decisions. The chief exception to this rule occurs in certain coöperative associations in which each stockholder has only a single vote regardless of the number of shares of stock that he may own.

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Preferred Stock. The many kinds of stock in modern business may with a few exceptions be classified as either preferred or common. By *preferred stock* is meant stock which has claims against the earnings and assets of the business prior to those of the other stockholders. As a rule preferred stock is limited to a fixed rate of dividends. It is also usually cumulative as to dividends, that is, no dividends may be paid

TRANSACTIONS ON THE NEW YORK STOCK EXCHANGE

Continued from Preceding Page.

1933	Stock High	Low	P Block and Dividend in Dollars	1932	High	Low	Last	Change	Close 1932	1931	High	Low	Last	Change	Close 1931	1930	High	Low	Last	Change	Close 1930	1929	High	Low	Last	Change	Close 1929	1928	High	Low	Last	Change	Close 1928	1927	High	Low	Last	Change	Close 1927	1926	High	Low	Last	Change	Close 1926	1925	High	Low	Last	Change	Close 1925	1924	High	Low	Last	Change	Close 1924	1923	High	Low	Last	Change	Close 1923	1922	High	Low	Last	Change	Close 1922	1921	High	Low	Last	Change	Close 1921	1920	High	Low	Last	Change	Close 1920	1919	High	Low	Last	Change	Close 1919	1918	High	Low	Last	Change	Close 1918	1917	High	Low	Last	Change	Close 1917	1916	High	Low	Last	Change	Close 1916	1915	High	Low	Last	Change	Close 1915	1914	High	Low	Last	Change	Close 1914	1913	High	Low	Last	Change	Close 1913	1912	High	Low	Last	Change	Close 1912	1911	High	Low	Last	Change	Close 1911	1910	High	Low	Last	Change	Close 1910	1909	High	Low	Last	Change	Close 1909	1908	High	Low	Last	Change	Close 1908	1907	High	Low	Last	Change	Close 1907	1906	High	Low	Last	Change	Close 1906	1905	High	Low	Last	Change	Close 1905	1904	High	Low	Last	Change	Close 1904	1903	High	Low	Last	Change	Close 1903	1902	High	Low	Last	Change	Close 1902	1901	High	Low	Last	Change	Close 1901	1900	High	Low	Last	Change	Close 1900	1899	High	Low	Last	Change	Close 1899	1898	High	Low	Last	Change	Close 1898	1897	High	Low	Last	Change	Close 1897	1896	High	Low	Last	Change	Close 1896	1895	High	Low	Last	Change	Close 1895	1894	High	Low	Last	Change	Close 1894	1893	High	Low	Last	Change	Close 1893	1892	High	Low	Last	Change	Close 1892	1891	High	Low	Last	Change	Close 1891	1890	High	Low	Last	Change	Close 1890	1889	High	Low	Last	Change	Close 1889	1888	High	Low	Last	Change	Close 1888	1887	High	Low	Last	Change	Close 1887	1886	High	Low	Last	Change	Close 1886	1885	High	Low	Last	Change	Close 1885	1884	High	Low	Last	Change	Close 1884	1883	High	Low	Last	Change	Close 1883	1882	High	Low	Last	Change	Close 1882	1881	High	Low	Last	Change	Close 1881	1880	High	Low	Last	Change	Close 1880	1879	High	Low	Last	Change	Close 1879	1878	High	Low	Last	Change	Close 1878	1877	High	Low	Last	Change	Close 1877	1876	High	Low	Last	Change	Close 1876	1875	High	Low	Last	Change	Close 1875	1874	High	Low	Last	Change	Close 1874	1873	High	Low	Last	Change	Close 1873	1872	High	Low	Last	Change	Close 1872	1871	High	Low	Last	Change	Close 1871	1870	High	Low	Last	Change	Close 1870	1869	High	Low	Last	Change	Close 1869	1868	High	Low	Last	Change	Close 1868	1867	High	Low	Last	Change	Close 1867	1866	High	Low	Last	Change	Close 1866	1865	High	Low	Last	Change	Close 1865	1864	High	Low	Last	Change	Close 1864	1863	High	Low	Last	Change	Close 1863	1862	High	Low	Last	Change	Close 1862	1861	High	Low	Last	Change	Close 1861	1860	High	Low	Last	Change	Close 1860	1859	High	Low	Last	Change	Close 1859	1858	High	Low	Last	Change	Close 1858	1857	High	Low	Last	Change	Close 1857	1856	High	Low	Last	Change	Close 1856	1855	High	Low	Last	Change	Close 1855	1854	High	Low	Last	Change	Close 1854	1853	High	Low	Last	Change	Close 1853	1852	High	Low	Last	Change	Close 1852	1851	High	Low	Last	Change	Close 1851	1850	High	Low	Last	Change	Close 1850	1849	High	Low	Last	Change	Close 1849	1848	High	Low	Last	Change	Close 1848	1847	High	Low	Last	Change	Close 1847	1846	High	Low	Last	Change	Close 1846	1845	High	Low	Last	Change	Close 1845	1844	High	Low	Last	Change	Close 1844	1843	High	Low	Last	Change	Close 1843	1842	High	Low	Last	Change	Close 1842	1841	High	Low	Last	Change	Close 1841	1840	High	Low	Last	Change	Close 1840	1839	High	Low	Last	Change	Close 1839	1838	High	Low	Last	Change	Close 1838	1837	High	Low	Last	Change	Close 1837	1836	High	Low	Last	Change	Close 1836	1835	High	Low	Last	Change	Close 1835	1834	High	Low	Last	Change	Close 1834	1833	High	Low	Last	Change	Close 1833	1832	High	Low	Last	Change	Close 1832	1831	High	Low	Last	Change	Close 1831	1830	High	Low	Last	Change	Close 1830	1829	High	Low	Last	Change	Close 1829	1828	High	Low	Last	Change	Close 1828	1827	High	Low	Last	Change	Close 1827	1826	High	Low	Last	Change	Close 1826	1825	High	Low	Last	Change	Close 1825	1824	High	Low	Last	Change	Close 1824	1823	High	Low	Last	Change	Close 1823	1822	High	Low	Last	Change	Close 1822	1821	High	Low	Last	Change	Close 1821	1820	High	Low	Last	Change	Close 1820	1819	High	Low	Last	Change	Close 1819	1818	High	Low	Last	Change	Close 1818	1817	High	Low	Last	Change	Close 1817	1816	High	Low	Last	Change	Close 1816	1815	High	Low	Last	Change	Close 1815	1814	High	Low	Last	Change	Close 1814	1813	High	Low	Last	Change	Close 1813	1812	High	Low	Last	Change	Close 1812	1811	High	Low	Last	Change	Close 1811	1810	High	Low	Last	Change	Close 1810	1809	High	Low	Last	Change	Close 1809	1808	High	Low	Last	Change	Close 1808	1807	High	Low	Last	Change	Close 1807	1806	High	Low	Last	Change	Close 1806	1805	High	Low	Last	Change	Close 1805	1804	High	Low	Last	Change	Close 1804	1803	High	Low	Last	Change	Close 1803	1802	High	Low	Last	Change	Close 1802	1801	High	Low	Last	Change	Close 1801	1800	High	Low	Last	Change	Close 1800	1899	High	Low	Last	Change	Close 1899	1898	High	Low	Last	Change	Close 1898	1897	High	Low	Last	Change	Close 1897	1896	High	Low	Last	Change	Close 1896	1895	High	Low	Last	Change	Close 1895	1894	High	Low	Last	Change	Close 1894	1893	High	Low	Last	Change	Close 1893	1892	High	Low	Last	Change	Close 1892	1891	High	Low	Last	Change	Close 1891	1890	High	Low	Last	Change	Close 1890	1889	High	Low	Last	Change	Close 1889	1888	High	Low	Last	Change	Close 1888	1887	High	Low	Last	Change	Close 1887	1886	High	Low	Last	Change	Close 1886	1885	High	Low	Last	Change	Close 1885	1884	High	Low	Last	Change	Close 1884	1883	High	Low	Last	Change	Close 1883	1882	High	Low	Last	Change	Close 1882	1881	High	Low	Last	Change	Close 1881	1880	High	Low	Last	Change	Close 1880	1879	High	Low	Last	Change	Close 1879	1878	High	Low	Last	Change	Close 1878	1877	High	Low	Last	Change	Close 1877	1876	High	Low	Last	Change	Close 1876	1875	High	Low	Last	Change	Close 1875	1874	High	Low	Last	Change	Close 1874	1873	High	Low	Last	Change	Close 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earnings and assets. Consequently, preferred stock appeals to that class of investors who desire a higher return than can be obtained from bonds, and who also desire a greater degree of security than can be obtained from common stock. Preferred stock, like bonds, usually represents an actual investment of capital in the corporation. For this reason, it is generally given a fixed par value of, say, \$50 or \$100 per share, which is supposed to represent the paid-in, or actual value of the stock at the time of issue. Dividends are based upon par value (face value). If the par value of a share of stock is \$100 and the interest rate 7 per cent, the stock pays \$7 a year, whether the market value of the stock has fallen to \$65 or risen to \$250. Thus a person who wishes to buy for investment and secure a high return for his outlay, does well to buy stock on the market at less than its par value, provided it is a sound stock that will continue to pay full dividends.

Common Stock. A holder of common stock carries the greatest risk on the chance of obtaining the largest profits, since the dividends that may be paid on common stock are limited only by the earnings of the business. But he is usually paid nothing until all prior claims are met. The foregoing explanation is only partly true, so far as the degree of risk is concerned. There is risk when the common stock represents an actual investment of capital, but not when the common stock is given outright as a bonus either to the promoters for their services or to the purchasers of the preferred stock. The control of management generally rests with the holders of common stock.

Practical Advantage of the Bondholders. Although the creditorship status of the bondholder and the ownership status of the stockholder make the two very different in legal theory, the difference is often greatly blurred in actual practice. In theory the bondholders are protected against loss by holding a mortgage on property of greater value than the total amount of the bond issue. The value of the property, however, usually shrinks seriously if the enterprise fails to earn profits. Fixed assets such as factories and machinery are difficult to put to other uses and in case of failure may shrink in value to only a fraction of the original cost. The bondholders, therefore, may discover that the security is far from adequate to cover their claims. Under such circumstances, the bondholders will probably suffer less if they do not exercise their right to seize the property, but merely wait and hope for better times.

ABUSES CONNECTED WITH THE CORPORATION

Fraudulent Promotion Schemes. Because of its efficiency as a device for raising capital, the corporation has proved an unusually fertile field for dishonest promoters. Investors are often persuaded to exchange their savings for corporate securities by the lure of profits, as the desire to "get rich quick" is one of the strongest of human motives. As a result, the gullible—and who is not gullible in certain circumstances?—are often more easily influenced by the promises of an eloquent but fraudulent promoter than by the conservative prospects of a sound enterprise.

It is chiefly in the field of highly speculative investments, such as mining and oil stocks, that the stockjobber still flourishes. Because of the great risk involved in such enterprises, conservative investment bankers are rarely willing to handle securities of that sort until the success of the undertaking is thoroughly established. This leaves the field open to the wildcat promoter. The spectacular success achieved by a few people in such undertakings always proves a strong temptation for the small investor, who rarely realizes how heavily the cards are stacked against him. Most of the state governments have attempted to remedy the evil by passing so-called blue-sky laws, which regulate the issue of corporate securities. Such laws have met with little success, however, because of the extreme difficulty of drawing a line between legitimate speculative investments and pure fraud. Greater hope may lie in educating the investing public in the principles of sound finance.

Stock Gambling. During the past fifty years conservative investment banking firms have largely displaced the wildcat promoter in the marketing of securities. The modern investment banker handles the distribution of securities purely as a merchandising business. His success, therefore, depends largely upon his ability to hold the confidence of the investing public. For a long time the number of sound investment opportunities was so great, and the facilities for obtaining good investment counsel were so well developed, that the average investor could generally avoid serious risks provided he was satisfied with a moderate rate of return upon his capital.

Following the stock collapse of 1929, losses were so severe in every quarter and confidence in even the soundest guidance was so shaken that it has been hard to bring the public into the securities market.

During the boom period, 1922-29, sound financial practices were overstepped by many conservative investment houses and by many commercial and savings banks. The worst effect of the collapse was upon investors of moderate means who were caught in the general wave of enthusiasm, and were encouraged to buy stocks by banks which lent them money for this purpose and never pointed out the difference between investment on the one hand and pure speculation on the other. Even the conservative investment trust, which originated as a device for handling the investment funds of diverse persons, sometimes employed these funds to purchase corporate control and fell upon evil days with the steady decline in the value of market securities. Thus the early years of the thirties brought into bold relief some of the dangers accompanying the benefits to be derived from the corporate method of raising money for legitimate enterprise.

Stock-Watering. Another evil in corporate finance difficult to destroy is overcapitalization, commonly called stock-watering, which consists in issuing more stock than the enterprise is worth. Such action is often pure fraud, but by no means always so. For example, a perfectly sound business enterprise may reorganize and sell its securities at a higher figure than the prospective earning-power of the concern justifies. This occurs most frequently on a rapidly rising stock market. The problem of stock-watering is especially hard to solve because the value of stocks depends largely upon earning prospects, and the outcome of the prospects can be determined only by the passage of time. Here again perhaps the only solution lies in education, and in the hope that investment bankers who deal in watered stocks will lose the confidence of the public and thus gradually eliminate themselves from business.

Evasion of Responsibility. Although the evasion of responsibility made possible by the modern corporation is an advantage to the individual incorporators, it may be a disadvantage to society. The corporation, although a legal person, has no standard of morals. For this reason, corporate officials are likely to feel less moral responsibility for what they do for the corporation than they would feel as private individuals. The corporation also provides a shield behind which individuals can escape the consequences of acts for which they would be held legally responsible if done as individuals.

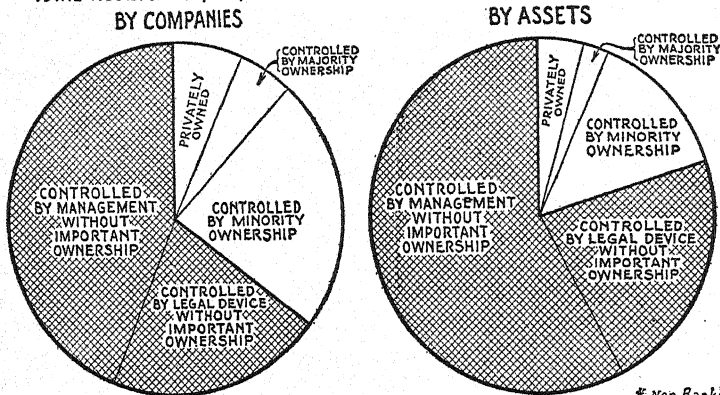
Separation of Ownership and Management. Until fifty years ago the usual type of business enterprise was the individual proprietorship

or the partnership. The owners of a business were also its managers. As a rule the dealings of the proprietor-managers with employees and customers were on an intimate, personal basis where moral responsibility to human beings was generally felt.

Today the close employer-employee relationship survives in small individual proprietorships, partnerships, and a few corporations, but it has ceased to be characteristic of modern business. Instead, in the

HOW THE 200 LARGEST* CORPORATIONS IN THE UNITED STATES ARE CONTROLLED

TOTAL ASSETS \$81,000,000,000. HALF OF ALL CORPORATE WEALTH IN THE U.S.



* Non Banking

These two diagrams show how control over a large portion of corporate assets is divorced from ownership. (From *The New York Times*, July 24, 1932.)

great industrial corporations, management has become widely separated from ownership. In place of two or three owners who also manage the business, thousands of shareholders scattered widely throughout the world own the enterprise, while the management generally centers in a small board of directors, who represent the owners (stockholders). The chief concern of the shareholders is the receipt of dividends, and as a rule their only contact with the management is through their power to vote. So long as earnings and dividends continue to be satisfactory, the average shareholder is not likely to be concerned with management policies, or even to bother about casting his vote. When a stockholder does vote, it is generally by proxy. This means that he authorizes one or more persons, usually designated by the management, to vote for him on whatever matters

may come before the annual meeting. Generally the persons who receive the proxies are active in the affairs of the corporation and actually control its activities. Thus the control of a large corporation, although in theory vested in the stockholders, in reality rests with the management except on rare occasions when the stockholders become aroused because of the way the corporation is operated and, led by opponents to those in control, wrest the management from the latter and give it to others.

The board of directors supervises the general policy of the enterprise and appoints the leading officials, who conduct the active management. The managers in turn deal with the employees, who may number many thousands, and with the customers, who may number millions. Obviously, the old personal relationships between owners and employees and between owners and customers disappear almost entirely. The foremen who deal directly with the employees, and the salesmen who deal with the consuming public, are likely never to see the president of the concern, and usually know few or none of the stockholders.

Evils of Directors Who Are Not Owners. This situation often leads to serious abuses. On the one hand, the financial interests of the directors may not be the same as those of the main body of stockholders. In fact, frequently a group of directors can reap large fortunes by ruining the enterprise. This may be accomplished by creating other corporations, of which the directors are the sole owners, and to which they let out contracts at ruinously high prices. Their losses as shareholders of the main enterprise are of no consequence compared with their gains as sole owners of the minor concern. An example of such tactics occurred during the building of the Union Pacific Railway. Several of the directors created another corporation, known as the *Crédit Mobilier*, to which they awarded contracts for building the railway at prices which were certain to ruin the Union Pacific while yielding enormous profits to themselves.

Another abuse is the directors' voting themselves or their friends outrageously high salaries or bonuses as officials of the concern. The sufferers are the main body of shareholders, who bought their stock in good faith.

Absentee Ownership. Even when the interests of directors and shareholders are the same, the very identity of their interests may lead to serious social consequences. Uniformly, the one vital concern

Is not Edison Company a people's project?

Stockholders April 1, 1926	Have an average investment of	Total stock owned April 1, 1926 (per value)
15,946	\$ 200	\$ 16,783,800
14,999	500	7,499,500
8,302	1,000	8,302,000
5,589	1,500	8,353,500
2,998	2,500	6,495,000
2,000	5,000	10,000,000
1,252	10,000	12,520,000
316	30,000	9,300,000
21	50,000	4,550,000
20	100,000	2,000,000
16	200,000	1,200,000
9	300,000	2,700,000
4	400,000	1,600,000
2	700,000	1,400,000
1	800,000	800,000
1	1,000,000	1,000,000
1	1,400,000	1,400,000
1	1,800,000	1,800,000
1	5,400,000	5,400,000
91,123		\$165,103,300

Of the 91,123 Edison Stockholders—
50,016 are men 2,132 are children
37,059 are women 916 are estates

EDISON 6% CUMULATIVE PREFERRED STOCK
(Authorized by the Railroad Commission of California)

PRICE \$25.00 per share, cash;
\$26.00 at \$5 per share per month

Over 90,000 Stockholders

Southern California Edison Company

LOS ANGELES

Responsibility in this corporation, according to the advertisement, is divided among 91,123 stockholders, over half of whom have an investment of \$300. Twenty of the largest stockholders have an investment about equal to that of 55,946 of the smallest stockholders. Ownership, as the advertisement suggests, is vested in many individuals; majority control, however, could be maintained by a few—for voting is attached to shares, not to individuals. (Advertisement in *Forbes Magazine*, May 15, 1926. Courtesy Southern California Edison Co.)

of the shareholders is large dividends. So long as dividends are paid, most shareholders do not concern themselves with the ways by which the profits are obtained. They are *absentee owners*. Their attitude often causes directors and managers to adopt policies of doubtful morality in order to retain their positions. For example, the president of an industrial enterprise may be very humane in his attitude toward labor, but since his success as an executive in the eyes of the directors and the stockholders depends upon his ability to earn dividends, he may be forced to treat his employees and customers merely as instruments to this end, to buy always in the cheapest market and sell in the dearest, regardless of the social consequences. It is an almost invariable rule that serious social evils result when large numbers of people receive incomes without any real knowledge as to how they are earned.

IMPORTANCE OF PROPER LOCATION

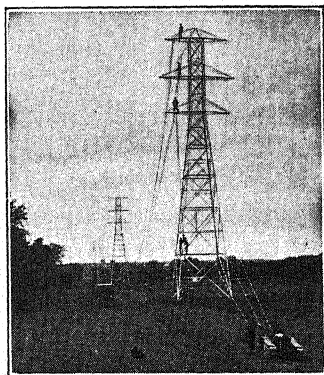
Factors Influencing Location. Modern industry seeks the most efficient size for productive units and the most efficient organization of business. It also seeks the best location, which is determined

chiefly by four factors: (1) raw materials, (2) power, (3) labor, and (4) the selling market for the product. The location of different plants will be influenced by these factors in different ways and in varying degrees. Certain industries must of course be near their sources of raw material. It would be very costly to ship the clay and fuel necessary for making brick to a distant location in order that the plant might have an ample supply of labor. Nor should we expect to find the canning of salmon in Wyoming.

However, modern science and human ingenuity have overcome many natural limitations to industrial sites. Eastern canning and preserving companies ship loganberries from the Pacific Northwest to make preserves to supply their trade, packing the loganberries in barrels with sugar. At one time tanning factories were confined to the regions where tanbark could be obtained; now chemists have extracted the necessary element from the bark, and tanning is carried on closer to the regions in which many plants use leather in their manufacturing processes.

Importance of Power. Nor is power the limiting factor it once was in manufacturing. Transportation systems are now able to supply coal in practically any region. Electricity has also increased the range of the use of water power. Formerly mills were forced to locate along streams where water power could be directly applied to the machines, but factories can now be located in more accessible places and receive power from waterfalls in the form of electric current. But in spite of such possibilities factories are still generally located near large power resources.

Nearness to Labor Supply. Although the use of machine processes has increasingly displaced hand processes, there is still enormous demand for human labor. Accordingly, in locating a new factory the management must be assured of an adequate labor supply. A large plant will perhaps be able to build up a sufficient labor group



The transmission of electrical energy offers possibilities that have just begun to be exploited. (Courtesy Commonwealth Power Co.)

in a region where no adequate supply previously existed; the United States Steel Corporation did this when it established extensive mills at Gary, Indiana, twenty-five years ago. A small plant, on the other hand, must seek an existing labor market even though other disadvantages are encountered, such as insufficient power and remote sources of raw material.

In general, the best labor markets are the large cities, which as a rule are also the best markets for the product. For this reason



Lunch hour in an industrial city. In the cities we find the greatest labor markets and the pools of unemployed workmen. (Courtesy Ford Motor Co.)

many industries flourish in and about large cities, in spite of disadvantages in both power and raw materials. Many concerns locate in places where they can find unemployed women and children, such as mining towns and steel centers where the work is too heavy for women and children. In such communities textile mills or paper-box factories, which depend largely on women or child labor, are able to obtain a cheap supply of such labor, especially if

periods occur frequently when the men are unemployed and the women and children find it necessary to provide the income of the family.

Easy Access to the Market. The sale of the products is essential to the success of a manufacturing business. Accordingly easy access to the market is an important factor in determining the location of the plant. With many industries this is indeed the all-important consideration. This is especially true of such industries as bakeries and confectioneries, which turn out a product that must reach the consumer in a fresh state. Similarly, a daily newspaper plant must be located in the center of a city, even though land values and transportation costs of raw materials are high, for a newspaper sells news and the market for its product is in the area of concentration.

Advantages of Specialized Localities. Whole industries are centered in certain parts of various states. Detroit is associated with auto-

mobiles; Grand Rapids, with furniture; Troy, with shirts and collars; Meriden, with silverware; Pittsburgh, with steel and glass; Chicago, with meat products; Rochester, with cameras. Such specialized communities have many advantages, especially if their growth depends mostly upon factors other than an early start. A trained labor force is apt to be found there. Buyers naturally go to such centers to make their purchases. Disadvantages also accompany specialized communities, particularly in periods of depression when the industry may cease to operate.

FACTORY-PLANNING

Proper Construction. After the location of the industry has been decided, the factory must be planned. The buildings, of course, should be well constructed and have ample provisions for light and ventilation. They should also be built so as to serve best the processes of manufacturing for which they are to be used. Millions of pounds of factory goods are unnecessarily rehandled in American factories year after year because of the improper layout of the plant. The fundamental considerations to be kept in mind are the necessary operations in the enterprise and their requirements for space, air, and light. The plant should be designed to house the processes properly.

Specialized Shops. Formerly a single manufacturing plant made printing presses, blow engines, water turbines, marine engines, mill engines, mining machinery, and in fact everything for which the firm could obtain a contract. Modern machine shops, however, confine themselves to the building of one or two classes of machinery. If the firm engages in making more than one line of machinery, it will usually provide a special department or shop for each type. One American concern, for example, builds nothing but hoisting cranes; another manufactures milling machines; a third produces locomotives. Textile manufacturers limit themselves to the making of ingrain carpets or rugs or lace curtains. Most industries at the present time are highly specialized.

Continuous Type of Plant. When the type of industry and the processes involved are known in advance, the plant structure can best be adapted to their particular needs. The industry may be of the so-called continuous type, in which the processes necessary for changing

raw materials into finished products are carried on within a single plant. Some continuous industries (cotton cloth, cement, steel) are synthetic, that is, raw materials are combined to produce a finished product; others, like meat-packing, are analytic, that is, several products result from the breaking-down of a single raw material. The packing industry produces from the cow, the pig, and the sheep not only the meat on our tables but the buttons on our clothes.

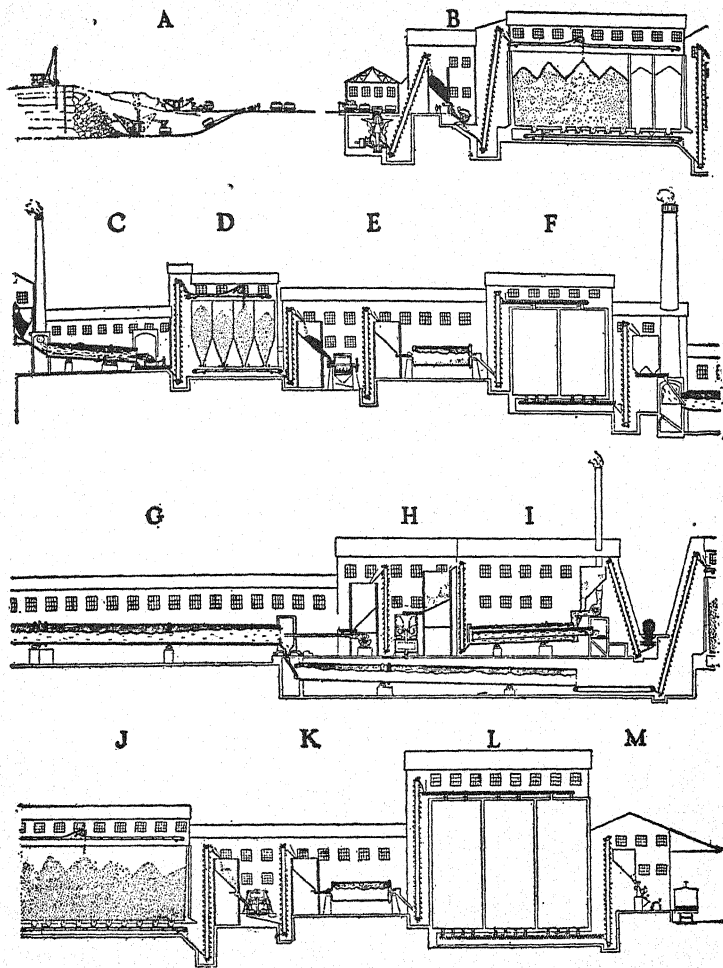
Assembling Type of Plant. In the assembling type of plant the final product is made by first producing the various parts or ingredients and then putting them together. Automobiles, pianos, locomotives, and radio sets are the products of this sort of process. Some assembling concerns receive the necessary ingredients and put them together with no important intermediary step, as in shoemaking, piano-making, and toy manufacturing. Industries such as heavy-tool manufacturing, or the building of locomotives and electrical equipment, however, involve many intervening processes or steps such as constructing the molds, making castings or forgings, and milling and turning.

Transporting Materials within the Plant. The location of machine units in the plant and the proper routing of materials to and from the units is an important part of the layout problem, but is too technical for discussion here. It is sufficient to point out that the transportation route of any material in course of construction should be the shortest possible and should also be as nearly as possible on the same plane. Of course, if land is cheap and the plant can be built on level ground, the routing scheme will be very different from that of a plant constructed in a large urban center where floor space is secured by vertical rather than horizontal construction.

SUMMARY

Although small businesses continue to exist in many lines, most great industrial processes today are carried on by large businesses. The large plant eliminates waste, favors specialization and the utilization of by-products, cuts costs, and has the surplus funds for scientific and industrial research. In addition to better productive methods, the big organization possesses more power in the market.

Businesses become large by simple growth, by integration, by combining similar small units, or by combining the manufacture of various products under one control. All of these methods contributed



The manufacture of cement, one of the best examples of a continuous manufacturing process. (A) Obtaining the raw materials, limestone and shale or clay. (B) The ore is crushed and stored in bins. (C) The crushed materials are removed from the storage bins and after a preliminary mixing, run through the dryer and then to the blending bins (D). (E) The mixture goes through a further process of grinding and pulverizing and into storage bins (F). (G) The mixture is burned in rotary kilns until clinkers are formed (H). (I) Further grinding and crushing of clinkers. (J) Clinker storage. (K) (L) Final grinding and pulverizing of mixture. (M) Cement placed in bags ready for market. (Courtesy *Concrete*.)

to the tremendous increase in the size of enterprises during the period 1920-29. New forms of combination in retail trade and in banking present new social problems because they are aimed primarily at securing market advantages rather than improving productive technique.

The corporation has proved the most suitable business device for uniting under a single control the vast sums of money necessary to conduct big business. The advantages of the corporation arise from its character as a fictitious legal person, which enables it to act promptly and in a variety of ways, and serves to limit the liability of investors. The two chief kinds of corporate securities are stocks and bonds. Bondholders are creditors who take no part in management, but who receive a fixed rate of interest prior to the payment of any dividends to stockholders. Stockholders are owners, who receive the profits and theoretically control the business. The corporate form leads to certain social abuses. Fraud and manipulation are not uncommon evils, but probably do less harm than the separation of ownership from management, which leads to internal exploitation by directors or to antisocial operations in the interest of stockholders, who tend to measure success in terms of profits.

Efficiency in production requires a plant of the right size, properly organized, and a site near power, raw materials, labor supply, and the selling market. Finally, the factory must be carefully planned so as to provide maximum productivity.

QUESTIONS AND PROBLEMS

1. Why is large-scale production desirable from the engineering point of view?
2. What social advantages have we gained from big business? What disadvantages?
3. Are the social advantages to be gained from large-scale production exhausted?
4. Does specialization of labor increase or decrease industrial interdependence? Illustrate.
5. Explain why modern production presents a problem into which both specialization and coördination enter.
6. Discuss the social effects of the growth of chain stores and branch banking.
7. Is the chief advantage of big business from the social point of view its

increased productive efficiency or its increased strength in the market? Which is of greater advantage to the owners?

8. What is an *entrepreneur*? Tell just what he does. Should he be classed with the capitalist group, with the workers, or is he a member of both groups? Explain. Give examples of entrepreneurs in your community.
9. Compare the partnership and the corporation in the following matters: legal basis; ownership; management; method of securing capital; division of profits. For what sorts of enterprises is each best suited?
10. Tell why the corporation has become the main form of business organization in our industrial system.
11. Mention problems created by corporations seeking to do business in more than one state.
12. Describe the financial structure of a modern corporation, including in your description the following terms: certificate of stock, common and preferred stock, bonds, priority of claims, cumulative dividends.
13. Explain the chief difference in the status of the bondholder and the stockholder. From the viewpoint of safety, which is ordinarily the better investment—bonds issued by a concern or stocks issued by the same concern? Give reasons. Answer the question from the viewpoint of (a) income and (b) profit.
14. What is stock-watering? Why should anyone resort to such an act? Who would be injured by it? How can an investor safeguard himself against watered stock?
15. *Report for a volunteer:* The blue-sky laws of your state.
16. What is meant by *evasion of responsibility* as applied to a corporation? How may such evasion injure society?
17. What abuses facilitated by the corporate form were brought to light by the depression starting in 1929?
18. How is ownership separated from management in a large corporation? In one like the American Telephone and Telegraph Company or the United States Steel Corporation, tell who usually controls the enterprise. Show how voting by proxy contributes to such control.
19. How do boards of directors sometimes benefit themselves through injuring the corporations of which they have charge? When such action occurs, who suffer most? Suggest ways by which the evil might be prevented.
20. Explain how a unity of interest between the directors and the stockholders may prove injurious to society.
21. Name three of the chief industries in your city or in the city nearest to your home. Point out location factors—raw materials, power, labor, and selling market—that probably influenced the location of one of the industries you named.
22. Suggest, if possible, reasons for the centering of the following industries

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in the places mentioned: furniture in Grand Rapids; automobiles in Detroit; cameras in Rochester; meat products in Chicago.

23. Show, with an example, how the following considerations should determine the design or plan of a factory: (a) productive operations; (b) requirements for air, light, and space.
24. Explain, with illustrations from your own community, if possible, the continuous and the assembling types of industry.
25. Visit a factory and note the routing of materials from the beginning of the manufacturing process to the completion of the product. How does the value of land affect the routing plan?

(For list of Readings in the Class Library, see the next chapter.)

Chapter 14

THE MANAGEMENT OF BUSINESS OPERATIONS

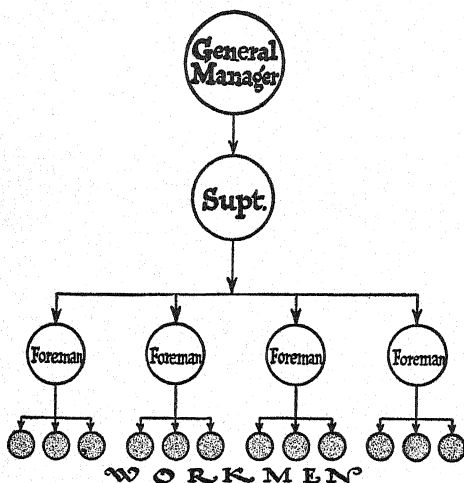
THE ORGANIZATION OF MANAGEMENT

Big Business and Problems of Management. One of the most difficult problems in large-scale enterprise is management. Many students of industry go so far as to say that the difficulty of directing huge organizations is the most serious limitation upon expansion. With the increase in the size of enterprises the simple personal relations between the owner-boss and the workers have become impossible, and in their stead less personal systems of control and management have developed. Under the pre-industrial system of production small numbers of workers were employed in the plant or shop, relations were personal in character, and each worker might perform any or all of the necessary operations. But with the increase in the size of industries and in the specialization of tasks, the diverse personal activities of earlier days have come to an end, and in most industries personal contacts between employer and employee are no longer possible. Nevertheless, where large groups of men are joined in a common enterprise, discipline must be maintained if order and efficiency are to result, especially in large manufacturing plants where hundreds and perhaps thousands of people are at work.

Military or Line Organization. In order to obtain the best results, varying schemes of management have developed. Perhaps the oldest form of definite organization is the *military* or *line* organization, so called because of its similarity to the system used in the army. In this system the lines of authority and instruction are vertical, that is, the workers are divided into groups in such a way that each group

receives its orders and instructions from one man only, usually a gang boss. The accompanying diagram will make the plan of control clear.

The chief advantage of the military type of organization is the ease with which discipline can be enforced. Under this plan the duties of



The military or line organization. The responsibility that each man bears is at once manifest. It is also clear that the men near the top have more undivided responsibility than they can handle if the plant is very large.

each worker are clearly defined and little room is left for misunderstanding. However, the military type of organization has definite limitations, which become very evident as the size of plants increases. Under the plan a few men are often loaded with responsibilities of management far beyond their ability to carry. Only a man of unusual capacity can administer the business side of the organization and also direct the technical side of production. As a rule it is not possible, therefore, to obtain the greatest efficiency when the entire

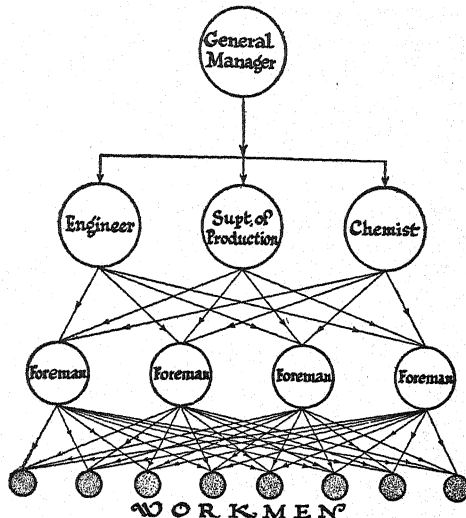
management rests upon a few men. In consequence, the military type of organization is on a decline in the larger industries.

Functional Organization. The second important kind of organization is usually called the *functionalized* type. This form of organization so divides work and management that each employee has as few functions as possible.

The plan is a method of applying the theory of the division of labor to management. The workmen in a machine shop, for example, are not placed under one foreman, but are under several. Each shop, according to the best authorities, should have four shop bosses—gang boss, speed boss, inspector, and repair boss. The gang boss has charge of the preparation of the work until the piece is set in the machine. The speed boss sees that the machine speeds indicated on the card are

attained; he must provide workmen on the machine with proper tools. The inspector is responsible for the quality of the work; both workmen and speed boss must finish the work to suit him. The repair boss sees that each machine is kept in working condition—clean, free from scratches, and properly oiled.

In addition to coming into contact with the four shop foremen or overseers, the workmen also come into contact with the representatives of the routing or planning department, whose function is to relieve the shop foreman of all responsibility as to how the work should be arranged and distributed to the machines. The four representatives in the planning department who have direct contact with the workmen are the order-of-work or routing



The functional type of organization. Here the superintendent, instead of being responsible for all the activities of all the workers, is confined to matters directly bearing upon production.

clerk, the instruction-card man, the time-and-cost clerk, and the shop disciplinarian. The routing clerk writes a day list instructing the workmen and all shop bosses concerning the exact order in which the work is to be done by each class of man or machine. The instruction-card man prepares shop orders, including standard instruction, lists of materials, and standard working-times. The time-and-cost clerk sees that all time and materials used are reported according to the job, workman, and shop so that correct payroll and other cost records can be made. The shop disciplinarian keeps the records on which promotions and discharges are based.

The chief merits of functional management are indicated by the foregoing explanation. Under the plan, experts convey accurate and exact guidance to each workman, who is therefore not dependent upon a foreman only partially educated in several fields. Instead of

the foreman needing to instruct new men, lay out the work for the day, and see that all the men and machines are working properly, several individuals have the responsibility for the enterprise, each man being especially fitted to direct in his own field. The greatest limitation of the functional plan is in discipline. Success of plant operation depends upon proper coördination of men and departments. Authority assigned to each individual in the military type of organization is definite, but in the functional type there is apt to be much overlapping, and conflict regarding the authority for certain policies.

Line-and-Staff Organization. After considering the advantages and limitations of the two types of control, one might expect that some plan based upon the chief merits of the two would be most practical. Such has been the case, the resulting system being known as the *line-and-staff* form of organization. Under this plan skilled specialists are in charge of departments which look after particular phases of the business. The necessary flow of authority from top to bottom is preserved, as is also the advice from the experts at the heads of the departments.

Such are the three main types of industrial organization now most in use in the United States. It would be hard to find a big plant organization, however, carried on exactly as the charts show. Instead, one would be more likely to find modifications and combinations of the three plans.

Scientific Management: The Taylor System. With the increase in the division of labor and the enlargement of industrial enterprises, a definite decline in efficiency has taken place surprisingly often because division of labor and specialization are sometimes carried too far. Frederick W. Taylor, chief engineer for the Midvale Steel Company, set out to find and remedy the causes for the decline in labor's efficiency.

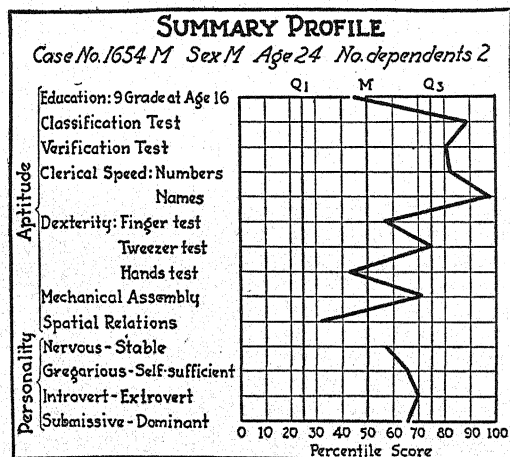
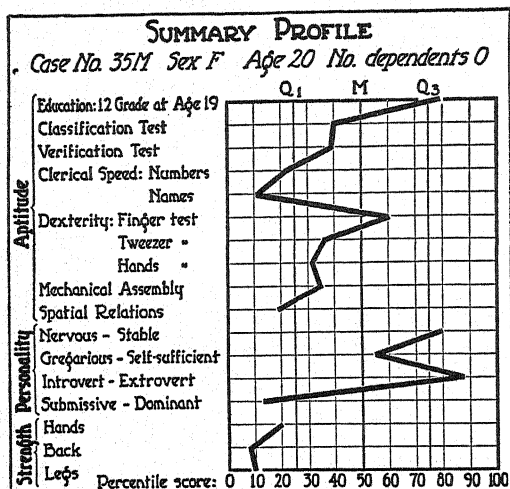
First of all Taylor observed and recorded carefully the motions of expert workers performing a given task. He then experimented, eliminating certain motions, changing others, altering the position of the materials which the workers used, and interspersing periods of rest. The result was a great increase in the efficiency of the workers, frequently with no additional fatigue on their part and substantial increases in their pay. For example, in a bicycle factory in which scientific management was introduced, the efficiency of girls who were employed to inspect the balls used in the bearings of bi-

cycles improved so that 35 girls were able to do with greater accuracy work that had previously required 120 girls. Applied to bricklaying, Taylor's principles of scientific management raised the rate from 120 bricks per man per hour to 350 bricks per man per hour. Similar improvements occurred in other lines. From the principles which Taylor formulated there has gradually developed a new and flexible science of management.

Scientific management may be defined as a *form of organization for the purpose of best utilizing the efforts of employers and employees through processes resting upon scientific investigation and analysis*. Under scientific management processes are routed, mapped, and scheduled until operations are no longer haphazard. Work is aimed precisely toward the attainment of a planned purpose, with the result of greatly increased efficiency.

The movement toward scientific management has aroused bitter opposition. Labor in general has pretty consistently maintained in the past that scientific management is only another scheme to take away from the worker his one remaining advantage, the knowledge of his trade; and that it is a scheme to speed up the worker in order to increase production without corresponding increases in wages. This opposition is of the same sort that faced the introduction of machinery at the start of the Industrial Revolution. The correct solution is not to ignore the advantages of scientific management, for increased production can help the worker as well as the employer. Labor leaders in fact are coming to see that increased production is a benefit to labor if the fruits of the increase are properly shared, and such leaders are directing their efforts toward securing for labor a larger income, rather than toward checking progress in efficiency.

Personnel Administration. To many employers, labor is a commodity to be bought and sold in the open market, like coal and other raw materials. This attitude is largely the result of the increase in the size of industrial plants and the lack of personal contact between owner or manager and the workers. With the growth of impersonal relations between management and workers, need has arisen for a bridge across the growing gulf. Such a bridge has been found in specialized personnel management, and many businesses have built up departments of personnel. What the personnel department is and what its duties are varies according to the firm studied. Usually



Of course it is foolish to believe that the human qualities mixed in a single man can be isolated and reduced to the precise notations on a graph. Nevertheless, personality studies are of some value, and may contribute much to the happiness of workers and the productivity of a plant. (From *The Survey Graphic*, February, 1933. Used by permission.)

the general divisions of its work are employment, health, safety, education, research, service, adjustment, and joint relations.

The duty of the employment division of the personnel department is to supply the management with information concerning the labor market and the source of supply. As a rule this division has control of wages paid, the hours of work, and other terms of employment. With the help of psychological tests and of personal interviews, new workers are placed in that part of the industry where they will fit best. The employment office studies carefully the main occupations in the plant, and the placement expert has at hand accurate analyses of the jobs to be filled.

In many of the older plants a worker

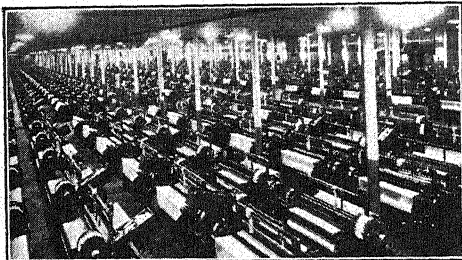
was fired when he did not fit the job assigned. The idea of personnel administration is to try such a worker in another department of the plant. Under the old system, for example, when a man who was large physically applied for work, the employment manager, in all probability, assigned him to a task requiring great physical strength. Trade tests and interviews, however, often show that such a man is much better fitted to work in a department not necessarily requiring physical strength. Another important work of the personnel department is to introduce the new worker to his job. Much of value may be contributed by the personnel experts in looking after the health and safety of the workers and in providing educational courses for training executives, foremen, and even workers, for particular tasks.

BUSINESS PROBLEMS OF THE INDUSTRIAL CORPORATION

Business Problems and Their Importance. The business problems of an industry are quite separate and distinct from the problems attending the operation of the plant. Business problems include, generally, the problems arising out of the price system; for it must always be kept in mind that goods not only have to be produced, but also have to meet the demands of a certain market at a certain price. This fact is always in the minds of the managers of business. Regardless of the quality of the goods or the efficiency of the producing organization, difficulties may appear in the market that cannot be solved by any kind of attention the manager may give to the producing organization.

Pressure of Price. The pressure of price is a constant force in business. The problem of price, therefore, requires as great attention as the problems of production. Someone within the producing concern must specialize in estimating the probable demand for the product manufactured, with reference always to probable competition in supplying the product and to the price which may be obtained for it. The person who is responsible for the relations of the business to the market must not only estimate what the general demand is for the product, but must also estimate the part of the demand that will come to his particular company. His estimate, of course, depends to a large extent upon the price at which his plant

can afford to sell goods, for if another concern can sell them cheaper it will get a proportionately larger share of the market. This estimate of the demand is of greater importance than may at first appear. With our highly



The loom room of a Tennessee textile mill. The costs of depreciation, taxes, and interest on borrowed money are so great in a huge undertaking that it is often fatal to let the plant remain idle for a substantial length of time. (Courtesy Borden Mills Co.)

developed plants for manufacturing, constant, or overhead, expenses are very great, and are only moderately affected by whether the product turned out is large or small. Machines and factories depreciate at about the same rate whether they are used or whether they are idle. Taxes and interest must always be paid. Consequently a fail-

ure to keep the plant operating most of the time and to sell most of the product may mean ruin. Or, to state the problem in another way, a business which has too large a plant because it has overestimated the market cannot thrive. Accordingly the responsibility that rests upon the person intrusted with estimating the demand is very great.

The problem described above, however, is not the most important task of the price expert. Not only must he keep an eye upon his competitors, and upon the possibility of new competitors coming into the market if he sets too high a price for the product of his firm, but he must also continually estimate the probable movement of the general level of all prices and the relation to this level of the prices of the goods in his own line of business. If the general movement of prices for goods and services which the firm must buy is upward, while the prices of the firm's products remain constant, income may become less than the necessary outlays. Thus, price-forecasting is of great importance in an economic system in which prices change as rapidly as in ours.

Planning for the Future. Some individual or group of individuals in the concern is forced to make comprehensive plans for the future, because business operations generally involve large and ex-

tended movements of raw materials throughout the entire world, and in addition require a wide range in time. A firm cannot make rubber tires from rubber not yet extracted from trees; and it cannot expect to have rubber from the trees if they have not yet been planted. The necessity for forethought and long-range planning is present in many large industrial establishments. In order to provide for their future needs firms must enter into buying contracts a long time in advance, and in consequence they may find themselves greatly embarrassed by serious changes in the selling price upon very short notice. In order to sail successfully between this Scylla and Charybdis of goods and prices, big corporations are forced to adopt the most scientific methods for control and comprehensive planning. What the price expert needs to assist him in his work is a thermometer and a barometer of business conditions to record and forecast price movements and consequently to serve as guides to production and the purchase of raw materials. Business thermometers would record the present conditions of business; business barometers would forecast future movements.

Control of Business Conditions. All of the business problems so far discussed center about securing materials on the best terms and selling products as widely and at as high a price as possible. This is not simply a question of *forecasting* business conditions. In normal times very powerful industries *make* business conditions. They control supply by buying up raw materials or by combining against producers of raw materials in order to buy cheaply, or by combining to ruin competitors in the market, or by withholding products or flooding the market, and in innumerable other ways. They affect demand in various ways—particularly by sales management and advertising. Sales departments are a prime division of any large enterprise. The small business man exercises little influence upon supply, but his success too depends upon how well he stimulates demand for his goods in competition with someone else's goods. Every small shop uses advertising devices, and every small merchant realizes the value of a good salesman.

The central problem in controlling business conditions, however, is the problem of forecasting and planning. Even the most powerful industry is helpless in the face of an unexpected collapse in world price-levels or a sudden turn in world trade. Invention, new turns in consumers' tastes, or a war may make one industry and break another

overnight. Even when a huge network of industries seeks to establish business conditions by securing control, its attempts to do so involve great expense and no one can do more than guess how successful its effort will be.

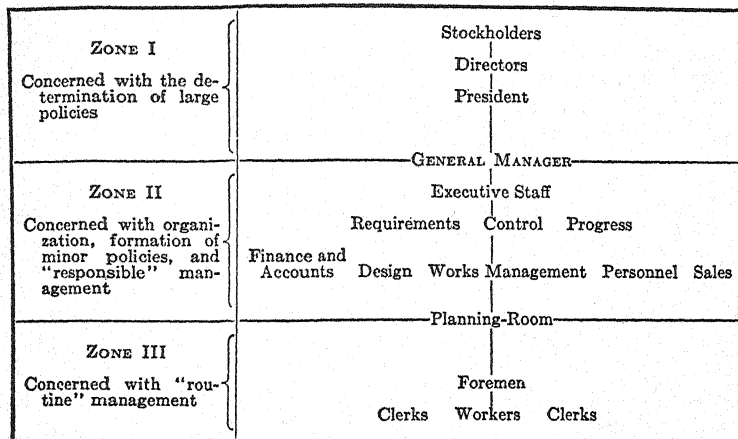
GENERAL PROBLEMS OF CORPORATE ENTERPRISE CONTROL

Problem of Divided Control. In a huge corporation control is exerted by a board of directors and by executive officers. The different interests and frequent conflicts of these two groups present a serious problem in modern industry, to understand which we must describe the functions of the directors and the executive officials.

Duties of Directors. The directors are elected by the stockholders of the corporation, who are themselves the owners of the business. Under the laws of most of the states the directors must be selected from among the stockholders, and therefore the directors are usually also part owners, although they may not own much stock. As a rule the directors of a corporation meet once a month or once in two months. They decide matters of general policy, such as the extension of operations, the establishment of general financial relationships, the reorganization of the operating executives, matters of public policy, mergers, wage advances or reductions, and other similar questions. Being responsible to and the representatives of the stockholders, the directors are chiefly interested in the ability of the industry to pay dividends. They have little direct knowledge of how efficiently the business is conducted, and they measure its success almost entirely in terms of profits. The directors frequently have interests in many large corporations, and may hold directorships in several of them.

Executives. The persons actually responsible for plant operations are the executives in charge of the business staffs and of the technical side of production. The executives are responsible to the directors. Occasionally an executive may also be a director and a shareholder of such importance that he may determine the major policies of the concern. But in large enterprises it is common to have a complete separation between the directors, representing ownership and interested in profits, and the executives, in charge of internal operations.

Conflict between Directors and Executives. Serious consequences result from the separation between the directors and the managers of the business, since the former look for profits, whereas the latter may be interested primarily in smooth, uninterrupted operation and in the maintenance of discipline. For example, when an executive asks for money to install a new motor, it is hard for a director to tell whether the executive knows that the new motor will increase profits, or whether the executive merely wants to supervise a plant in which



A suggested classification of the powers and duties which should be assumed by the groups and persons who are active in a large-scale corporate enterprise. Of course, we are a long way from this goal today, especially with reference to the stockholders responsibilities. (Courtesy of Person: *Journal of Political Economy*, University of Chicago Press, Vol. XXVIII, No. 2.)

every engine is of the latest make. If executives ask for money to break a strike, it may be true that the appropriation of the money would benefit the industry. On the other hand the executives may be prejudiced against the workers and may desire the appropriation chiefly to maintain discipline and win a battle. There are innumerable other instances in which it may be disadvantageous to have executives who have practically no interest in the size of profits. Of course, an executive will lose his job if the business fails. But for a high-ranking executive earning \$20,000 a year, it makes little difference whether the corporation earns \$17,000,000 or \$19,000,000. Besides, the

executive frequently has no way of knowing the effect of his action upon the general condition of the business. Such are some of the evils of managers who are not owners.

Far greater evils may come from control by absentee directors who represent the owners, for frequently they do not know the business they control. On the whole, therefore, it may be best to give the managing executives full sway. They will increase production without considering the narrower profit advantages of withholding output. They know the conditions of the worker and are in a better position to appreciate his lot. Their interests do not conflict with those of the public served by the industry, and they may therefore consider the service of the industry to society rather than its service to the owners alone.

Effect of Absentee Stockholders. The lack of interest of the directors in the problems of operation is magnified by the attitude of the stockholders. Stockholders as a rule meet only once a year for what is known as the annual stockholders' meeting, at which they hear and occasionally discuss the report of the board of directors for the year. Stockholders are usually poorly informed concerning the policies of the corporation and generally have little interest in them. The stockholders, like the directors, are concerned almost solely with dividends. This is so true that, as we have seen, most of the voting in a stockholders' meeting is by proxies, which means that many stockholders never attend one. By means of proxies the directors are able to secure a control of policy which is almost absolute, and accordingly a few active individuals in the board of directors are able to establish policies in which, for various reasons, they are particularly interested, and to maintain this control over a long period of time. This situation often results in the control of manufacturing corporations by financial houses who are interested more in using the corporation for their own purposes than in maintaining the interests of either the stockholders or the operating force.

Control of Industry by the Workers. Absentee ownership with its attendant evils has brought some people to suggest that the complete control of business operations should be in the hands of those who actually conduct the processes of industry. The logical conclusion of this suggestion is that the growing demand of workers for a share in the direction of industry should be satisfied. In this way, it is maintained, the withholding of effort, which is often a serious drawback

in industry, might be overcome, and the confusion of policy resulting from conflicts between various interests would be eliminated. Finally, it is said, the operation of industry under such control would be directed toward realizing the two great objectives of production: securing a greater product and making productive activities more satisfactory and beneficial to those who are engaged in them.

SUMMARY

Business must be organized to take full advantage of improvement in productive techniques. In large plants there is difficulty in organizing into a working unit hundreds, or even thousands, of men. To accomplish this, one of several methods is used. Under the *military plan*, each group of workers gets its orders from a single foreman. Under the *functional plan*, there is specialized supervision as well as specialized work. The *line-and-staff plan* combines the merits of the other two. *Scientific management* attempts to use labor efficiently, guided by the results of painstaking analytical studies. *Personnel administration* and *job analysis* seek to utilize each man to the utmost by fitting him into the right job.

The business problems of the corporation are even more important than internal organization. Estimates must be made of probable demands, of price trends, and of other factors entering into future success. Powerful interests may to a limited extent control trends as well as follow them.

From the social point of view, the central problems arise from the conflict for control between absentee owners and management. Control by nonowners sometimes leads to inefficiency, but on the whole executive control by those familiar with the industry should be unhampered by absentee owners. Only when management is not too closely checked by pressure for profits is it possible for the social values in industry to become paramount, for productive advances to continue unchecked, and for the welfare of the workers to receive due consideration. The first step toward the conservation of social values is greater control by internal management. The second step is workers' participation in the control of industry.

QUESTIONS AND PROBLEMS

1. What seems to be the most serious difficulty in organizing a huge enterprise?
2. What is meant by the *military* or *line* (the vertical) plan of business control? by the *functionalized* (or horizontal) plan? by the *line-and-staff* plan? Point out merits and weaknesses of each plan.
3. Explain *scientific management*. What is its main purpose? State its main principles. Why has it sometimes been opposed by labor? Have you ever seen any instances of scientific management in your home or school? Explain.
4. What is meant by *impersonal relations* in industry? Tell how the Industrial Revolution helped to bring about such relations.
5. Explain the activities of a personnel department in a large industry or store. Is such a department advantageous to the workers? Give reasons.
6. How do prices exercise a controlling influence over the operation of a business? Illustrate.
7. Why is long-range planning necessary in most large industries? Give an example of long-range planning.
8. What is meant by (a) a *business thermometer* and (b) a *business barometer*? Give illustrations. Might wheat serve as a business thermometer or barometer? If so, how should you use it? Be specific.
9. Illustrate ways by which producers attempt to influence or control demand.
10. Point out possible causes of controversy in an enterprise between the heads of the technical production staff and the business staff. Tell how such controversies may affect the public.
11. How may the separation of ownership from management cause inefficiency? How does similar trouble sometimes develop between the directors and the operating officials? If possible, suggest remedies for such problems.
12. Prepare a floor talk on one of these subjects: (1) how capital is secured, owned, and controlled today; (b) how productive enterprises are now organized.

READINGS IN THE CLASS LIBRARY

- *1. "Teamwork in Industry," L. S. Lyon, Hill, *Readings in Vocational Life*, pp. 32-44.
- *2. "Joint Stock Companies and Early American Commerce," E. R. Johnson, Forman, *Sidelights on Our Social and Economic History*, pp. 107-10.
- *3. "Development of Corporations," T. W. Van Metre, *ibid.*, pp. 193-95.

4. "Advantages and Disadvantages of Trusts," *ibid.*, pp. 195-98.
5. "The Woman and Her Bonds," Edwin Lefevre, Center, *The Worker and His Work*, pp. 81-95.
- *6. "The Corporation," Patterson and Scholz, *Economic Problems of Modern Life*, pp. 88-114.
- *7. "Characteristic Features of Present-day Industry," Marshall and Wiese, *Modern Business*, pp. 25-34.
8. "The Task of the Business Administrator," *ibid.*, pp. 38-57.
9. "The Administration of Manufacturing," *ibid.*, pp. 93-123.
10. "Financial Operations and Administration," *ibid.*, pp. 339-65.
- *11. "The Form of the Business Unit," *ibid.*, pp. 453-78.
- *12. "The Reorganization of Dodge Brothers," Weld and Tostlebe, *A Case Book for Economics*, pp. 142-43.
13. "Capital and Its Organization," Clay, *Economics*, pp. 92-106.
14. "The Pervasive Influence of Competition," *ibid.*, pp. 107-15.

Chapter 15

COÖRDINATING BUSINESS AND INDUSTRY

THE PROBLEM OF COÖRDINATING INDUSTRIAL GROUPS

Modern Interdependence and Coördination. If a Ford plant manufactures every part of the Ford car, the workmen making horns must work at a speed that will turn out one horn for every car, and no faster. The task of organizing a huge factory so that every activity will fit into the whole scheme is not easy. But this problem is simple compared to the task of coördinating industrial groups all over the country, making similar and different products under managements which have no connection one with another. Yet such coördination is necessary. With the increase of specialization, various specialized industries perform small sections of the work necessary to prepare a complete product, and great dislocation of industry results when the sections are not fitted tightly together.

Coördination of Different Processes within One Industry. The growers of wool, the makers of yarn, the weavers of cloth, and the makers of clothes cannot escape the relationships they bear to each other. They can, however, fail to maintain their relationships in workable order, and thereby fail to keep flowing the line of commodities which begins with the growing of wool and ends with the wearing of clothes. Each unit in the sequence depends upon the units that go before and those which come after; and none can operate without the others. All must go forward at approximately the same speed. With diversified ownership and holdings scattered all over the country, the task of coördination is very difficult.

The flowchart illustrates the wool industry's value chain and supporting services. At the top, the 'PRODUCER' section includes 'LOCAL FLOCK', 'LOCAL BUTCHER', 'CO-OPERATIVE PROCESSING', and 'LOCAL SHIPPER'. These lead to 'INDUSTRIES' (Wool, Hides, Meat), which then connect to 'WHOLESALE DISTRIBUTION' and 'MANUFACTURE'. The 'MANUFACTURE' section includes 'Woolen Fibres', 'Chemicals', 'Grease', 'Wool', 'Hides', 'Meat', 'Woolen Fibres', 'Chemicals', 'Grease', 'Wool', 'Hides', 'Meat'. The 'WHOLESALE DISTRIBUTION' section includes 'Wool', 'Hides', 'Meat'. The 'EXPORT MARKET' section includes 'Wool', 'Hides', 'Meat'. The 'CONSUMER' section includes 'Wool', 'Hides', 'Meat'. The 'CONTRIBUTING SERVICE' section includes 'Woolen Fibres', 'Chemicals', 'Grease', 'Wool', 'Hides', 'Meat'. The 'INSURANCE' section includes 'BANKERS', 'Finance', 'Insurance'. The 'MARKET RESEARCH' section includes 'Quotations'.

INDICATES PRODUCER OWNERSHIP
INDICATES CONSUMER OWNERSHIP

INDICATES CONSUMER OWNERSHIP

This complex chart is actually a simplification of the processes by which the wool trade is carried on. And the wool trade is but one of thousands of trades, all of which are inter-related. (From Report of Joint Committee of Agricultural Inquiry, *H. R. Report 408*, Pt. IV, 1922.)

Coördinating Similar Processes Carried on by Different Businesses. The problem of coördination is complicated by the fact that single processes are not united under one control. The situation is not so simple as one great woolgrower supplying one great weaver of cloth, and one great weaver of cloth supplying one great maker of clothes. The truth is that a multitude of growers of wool are scattered all over the world, that there are thousands of makers of yarn, that there are probably almost as many weavers of cloth and hundreds of firms engaged in making clothes. The grower of wool may sell the wool to any of the makers of yarn, and any of the makers of yarn may sell the yarn to any of the weavers of cloth, and any of the weavers of cloth may sell the cloth to any of the makers of clothes.

Coördinating Different Industries. It is also important that different industries have mutually satisfactory working relationships. Each industry must not only maintain stability within its own structure, but must also maintain relations with other industries. Note, for example, the relationship between the wool industry and the steel industry, for wool cannot be made into clothes without the aid of machines which are made of steel. And wool cannot become clothes without the aid of coal which creates power, and cotton from which thread is made, and indeed without the products of many other industries which at first would seem to bear scarcely any relationship to wool, such as the oil that furnishes the lubrication to prevent the machines from grinding themselves to powder. Without machinery for coördination modern industrial life would be impossible.

MIDDLEMEN AND OTHER AGENCIES OF COÖRDINATION

Rise of the Middleman. The earliest systems of exchange were direct, that is, by barter. The person who wanted something went to the person who had it and procured it in exchange for something wanted by the other person. This "double coincidence of demand" happened too seldom to make barter workable when the kinds of goods exchanged increased greatly in number. In consequence, the early systems of barter were gradually displaced by a system of market mechanisms and middlemen. The complicated middleman structure of today, which ranges all the way from a single individual who buys and sells to the great organized markets where goods are

exchanged, exists for the purpose of keeping the makers of goods in touch with their users. That is to say, the whole marketing system was gradually built in response to the need of bringing together the man who had something to sell and the man who wanted it.

Middlemen as Price-Forecasters. In studying the middleman marketing system we should always remember that the individuals who engage in it work, like others in the business world, for profit. They are specialists in buying and selling. Their business is to










"Middlemen." (Courtesy U. S. Dept. of Agr.)

buy in a cheap market and sell in an expensive one, and the difference between the low price in one market and the high price in another is the center of their interest. Much of their activity is given, therefore, to anticipating changes in prices. They make it their business to estimate what will happen to the prices of specific goods at some future time and upon the basis of their estimate they risk their capital. Middlemen usually find it convenient to form an organization; they often locate their activities in a specific place or even erect an expensive building for the purpose.

Middlemen as Coördinators. The most important service of the middleman is the coördinating of industrial groups. It is hard to see how goods could be moved from the producer to the consumer without the help of these specialists in coördination who buy in cheap markets and sell in dear ones; for buying in a low market obviously means buying where goods are not greatly wanted, and selling in a high market obviously means selling where the want for goods is great. What the middleman really does, therefore, is to start

A CHARACTERISTIC OF THE PRODUCE TRADE

SMALL-UNIT, WIDE-VARIETY BUYING

	A Wholesaler Receives a Car of 320 Crates of Lettuce	
		A Jobber ordinarily Buys 20 Crates or $\frac{1}{16}$ of a Car.
		Most Retailers Purchase One Box or $\frac{1}{320}$ of a Car.
		Mrs. Consumer Buys One Head or $\frac{1}{7680}$ of a Car.

Everybody Wants a Little of Everything and not Much of Anything.

This is why the large potato grower in Georgia cannot ship direct to Mrs. Jones on upper Broadway. (Courtesy The Port Authority of N. Y.)

the movement of goods from places where the supply is too large to places where the supply is too small.

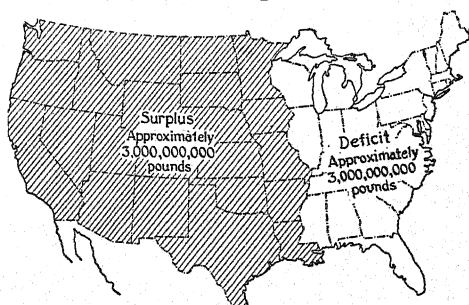
Other Agencies That Assist in Coördination. The middleman system is not the only mechanism in modern industrial society that assists in coördination. Great systems of transportation and commerce such as railways, steamship lines, and airways are also essential agencies. They help to link business with business, firm with

firm, and even region with region, thereby reducing differences in time and space and making easier the working of the whole industrial world as one system. To a lesser degree the postal service, telegraph, telephone, and radio assist in the process. Banks and other financial houses are also important agencies in coördination. Bankers not only maintain relationships with many different firms, thereby forming a link between them, but they also draw businesses closer together and make communications easier by extending credit and issuing money. In addition they form a medium for the pooling of savings and for furnishing capital to firms in need of it.

COMPETITIVE PROFIT-SEEKING AS THE CENTRAL OBSTACLE TO COÖRDINATION

Concealment of Information. Even under the best circumstances coördination would be difficult, because it is impossible to get an exact survey of the amounts of various kinds of articles produced and demanded. Under our competitive system of profit-seeking, the difficulty is even greater. This is because it is to the advantage of those who tap the sources of information to keep secrets and thus gain a start over competitors. It would certainly be of benefit to society to have all industry working in full possession of relevant information rather than in semidarkness.

Middlemen and Profit-Seeking. Frequently the middlemen, who are supposed to be the key to bringing goods to the proper market, which is the essence of coördination, find that they can make greater profits by withholding goods from the market. When this happens, they prevent the activity that they are supposed to perform, for they stop the flow of goods from one place to another rather than aid



The function of the middleman is to help the 3 billion pounds of surplus meat in the West find its way eastward. But sometimes he can make larger profits by allowing only 2¾ billion pounds to be transferred. (Adapted from *Swifts Yearbook*, 1928.)

it. Instead of bringing the producer and the consumer together, middlemen also at times find it profitable to conceal information vital to the producers and the consumers for whom they act as agents. Middlemen frequently work on a commission basis, and thus have an interest in the price of products, which may conflict with the interests of consumers or even of producers.

Industrial Competitors and Profit-Seeking. Coördination is based upon agreement to coöperate. Obviously it is hampered when each business wants to capture a larger part of the market, and produces goods in the hope that its wishes will be realized. No amount of knowledge of subsequent total demand will necessarily prevent overproduction of some articles so long as the individual business man does not know what part of the total demand will be directed toward his shop.

REMEDIES FOR THE EVILS OF COMPETITIVE PROFIT-SEEKING

Present Business Tendencies. It is so difficult to coördinate industry under competitive profit-seeking conditions, and the wastes due to lack of coördination are so great, that two remedial tendencies have attained significance in recent times. The first, and less important, is the movement to cut down the number of steps in the industrial process by eliminating middlemen. The fewer the links in the chain between the producer and the consumer, the easier it is to fit the links together. Thus modern large-scale retailers such as department stores, mail-order houses, and chain grocery stores often attempt to manufacture the goods they sell, and likewise the manufacturer often tries to retail the goods he manufactures. The second tendency, of major importance, is toward business consolidation and combination.

Business Consolidation and the Government. In Chapter XIII the trend toward business consolidation was described. At this point it is necessary to add only that the desires to coördinate activity and eliminate competitive profit-seeking, as well as the desire to increase production, contributes to such consolidation. Business consolidation, starting in earnest after the Civil War, aroused great fear of the evils of monopoly. The consensus of opinion was that powerful interests would destroy the small business man and ex-

plot the public. Free competition was regarded as the life of trade and the safeguard of the public interest. The courts, therefore, especially after the passage of the Sherman Anti-Trust Act of 1890, dissolved many large combinations, the largest being the Standard Oil Company, which, had welded together small oil producers all over the nation.

The Rule of Reason in the Courts. When the Supreme Court dissolved the Standard Oil Company, the Court announced the famous *rule of reason*. It declared that, despite the Sherman Act, combination was illegal only when it resulted in an *unreasonable* lessening of competition. This means that the question is one of degree or public policy. In recent years the Supreme Court has shown a growing recognition of the advantages of large-scale enterprise and holds that most combinations are reasonable. Thus the famous suit for the dissolution of the United States Steel Corporation was not successful.

Open Combinations Growing in Favor. The older combinations were mostly *closed combinations*, that is, they were in large measure separate businesses merged together by turning their stock over to a central control device called a *trust*. That is why industrial combines are usually called trusts and why we have the term *trust-busting*. But frequently businesses want to remain separate and also make agreements with one another as to sharing information, uniform trade practices, and the like. This new practice generally takes the form of an *open combination*, or *trade agreement*. For a while the Supreme Court frowned on such agreements; today, however, there is increasing realization of the necessity of coördinating industrial activity. A good example of the new viewpoint is this excerpt from an opinion by Mr. Justice L. D. Brandeis, whose experience with economic affairs probably exceeds that of anyone who ever sat upon the Supreme Court.

It is claimed that the purpose of the "Open Competition Plan" was to lessen competition. . . . The Sherman Law does not prohibit every lessening of competition; and it certainly does not command that competition shall be pursued blindly, that business rivals shall remain ignorant of trade facts or be denied aid in weighing their significance. It is lawful to regulate competition in some degree. But it was neither the aim of the plan, nor the practice under it, to regulate competition in any way. Its purpose was to make rational competition possible by supplying data not otherwise available and

without which most of those engaged in trade would be unable to trade intelligently.¹

The effect of the National Industrial Recovery Act of 1933 upon open combinations will be discussed in the final chapter.

Need for Government Regulation of Business. Once big business is recognized as socially beneficial because of its efficiencies and its possibilities for increasing wealth, the problem of government regulation arises. It must be remembered that combination does not do away with the profit motive. Combinations occur to insure greater profits and only indirectly to benefit the public. Thus, there may be many conflicts between what is good for business and what is good for society. When business is big, the conflicts are so important that the Government should regulate them.

The law generally protects private business from governmental interference. However, under its *police power*, the state may regulate anything affecting the safety, health, and morals of the people. The courts have been slow to expand the meaning of these terms, and have generally said that regulating economic affairs, such as prices and the right to do business, is unconstitutional.

Public regulation of economic affairs, therefore, is largely limited to a special class of business called public utilities. When does a business become a public utility? Whenever the Court decides that the business is "affected with a public interest." This is again a question of degree. Railways, gas companies, electric-light companies, grain elevators, banks, insurance companies, have all been held to be public utilities and are subjected to price regulation, in addition to being required to secure certificates of "public convenience and necessity" before entering business. But in many instances, the Supreme Court has been very slow to take the position that under modern industrialism *any* large business is "affected with a public interest." It has not stated clearly that the basis of public interest may be *economic*, as well as social (health, safety, and morals). This attitude of the majority of the Court is a serious barrier to the regulation of business. In 1932, for example, the Court held that ice companies were not "affected with a public interest" and that the sale of ice therefore

¹ Dissent, *American Column and Lumber Co. vs. U. S.*, 257 U. S. 377 (1921). Brandeis's viewpoint has since been accepted by the Court. See *Maple Flooring Ass'n vs. U. S.*, 268 U. S. 563 (1925).

could not be regulated by the state of Oklahoma. Mr. Justice Brandeis, in a dissenting opinion, said:

Misery is widespread in a time, not of scarcity but of overabundance. The long-continued depression has brought unprecedented unemployment, a catastrophic fall in commodity prices, and a volume of economic losses which threatens our financial institutions. Some people believe that the existing conditions threaten even the stability of the capitalistic system. . . .

All agree that irregularity in employment—the greatest of our evils—cannot be overcome unless production and consumption are more nearly balanced. Many insist there must be some form of economic control. There are plans for proration. There are plans for stabilization. Some thoughtful men of wide business experience insist that all projects for stabilization and proration must prove futile unless, in some way, the equivalent of the certificate of public convenience and necessity is made a prerequisite to embarking new capital in an industry in which the capacity already exceeds the production schedules. . . .

To stay experimentation within the law in things social and economic is a grave responsibility. Denial of the right to such experimentation may be fraught with serious consequences to the nation. It is one of the happy incidents of the Federal system that a single courageous state may, if its citizens choose, serve as a laboratory, and try novel social and economic experiments without risk to the rest of the country. This court has the power to stay such experimentation. We may strike down the statute embodying it on the ground that, in our opinion, it is arbitrary, capricious or unreasonable. . . . But in the exercise of this power, we should ever be on our guard, lest we erect our prejudices into legal principles. If we would guide by the light of reason, we must let our minds be bold.²

PRICE AND VALUE

Importance of Price. Problems of price arise so frequently in modern industrial life that it is often said that contemporary economic activity is centered within a *price system*. Goods and services are made for money, bought for money, and sold for money. *Price* is exchange value expressed in terms of money. When we see a book in a store marked \$3.50 we know that we may have the volume by giving for it three and a half of the dollars we have acquired in some other way. Everything we acquire or give up through ordinary commercial channels is secured or given up on a similar understanding. In the United States dollars are the common denominator of books, hats,

² New State Ice Co. vs. Liebman, 285 U. S. 262 (1932).

pins, and houses. All business men, therefore, in regulating and coordinating their activities, must keep a steady and discerning eye upon the operation of prices.

Price and Value. The difference between the *value* of a good or service and the price it sells for is seen at once when we say that a thing is *worth* more than it sells for. Apparently worth is not always indicated by actual price. How much one might be willing to pay for a loaf of bread is a problem that we can never solve. All we know is that we must have been willing to pay as much as we paid or the loaf would not have been sold. This desirability of things to an *individual* has always seemed to economists one of the fundamentals that determines prices; this *value-in-use*, as it is commonly called, seems to fix a limit beyond which prices cannot go. The upper limit of price is set by value-in-use, or utility.

But this explanation of price-fixing goes only part way. If the upper limit of price is set by value-in-use, what sets the lower limit? Here economists usually fall back upon the *cost of production* as the limit "below which prices cannot *permanently* fall." It is apparent that prices cannot long remain below the cost of production, because any concern forced to sell its goods at less than they cost to produce could not long continue in the business of producing. And if consumers refused to pay prices as high as the cost of production the commodity would soon not be made at all. Of course, it may be better for a time to continue to produce goods at a loss rather than to stop the whole plant. But the practice cannot go on permanently.

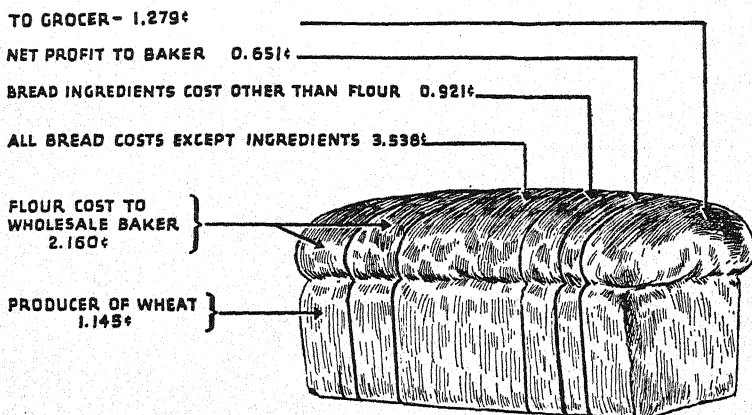
It is also true that workers will not without strong resistance sell their services for less than a money income that will maintain a certain standard of living. Wages may be thought of as the cost of producing services. But the worker, unlike the business man, is not spending money to get profits. He is spending his body to get food and shelter, and he may be forced to work in order to keep alive even when his wages do not come up to a decent standard. Thus it might be more exact to say that the lower limit of the price of labor is determined by the cost of producing a workman at a certain time and place, that is, by the cost of hiring a man in the labor market.

Factors Fixing Price. Value-in-use, or utility, and the cost of production, then, are, generally speaking, the upper and lower limits of the long-time price range. But as a rule prices are fixed somewhere between these limits. Just how and at what point prices are fixed is

determined by a number of highly variable conditions: for example, (1) whether the commodity because of its perishability must be sold quickly or whether it can be held for sale indefinitely; (2) whether or not its supply is easily extensible when a greater demand for it arises; (3) whether costs per unit rise or fall when more or less of the commodity is produced; (4) whether or not the demand for the commodity is elastic—that is, whether, if the price falls, people will readily buy more, or if the price rises, people will quickly stop buying; and (5) whether either the people who buy or those who sell possess any peculiar advantages in bargaining, such as a monopoly of the supply or a control of the demand. Such conditions may cause the ordinary price range to be anywhere within the upper and lower limits described above, depending upon the conditions in the market at the time of the exchange.

RETAIL PRICES, PRODUCERS' PRICES, AND PRICES
FIXED IN MIDDLEMEN'S MARKETS

Retail Prices. In modern industrial society the final consumers of goods usually buy at prices that are fixed. In early days the buyers of goods met the sellers of goods at fairs and made a "higgling" bargain. But as business is carried on now, the ordinary consumer goes



This diagram shows how different groups contribute to the final cost of a well-known article. (Adapted from *The United States Daily*, July 1, 1933.)

to a retail establishment and asks for what he wants; he then pays the price attached to the goods, or he gets along without the goods. In other words he has only a veto power over prices. But the prices have been set with his veto power in mind, for the retailer has at least a notion of the number of goods which will be taken at a certain price, and this consideration has an important influence on the price he sets.

The other most important element in determining the prices the dealer sets is of course the price he himself has to pay for the goods—this and his expenses of doing business. For staple articles, such as sugar, flour, or salt, retailers buy from wholesalers at prices which as a rule are uniform and relatively unchanging. Indeed the wholesaler's price represents the manufacturer's estimate as to the amount retailers will purchase under certain conditions, together with estimates of the prices that are necessary to maintain production. But fixed prices apply only to staple or branded and nationally known goods. For many other commodities the retailer bargains with middlemen, paying a price that is fixed within the limits set by his knowledge of the retail market and the middleman's requirements for costs and profits. It is in this bargain, where consumers do not participate except as an estimated quantity, that retail prices are fixed.

Producers' Prices. Producers' prices are determined at the other end of the marketing process. Here too there are fixed relationships. Very often the producer, like the customer, has only a veto power. Prices that are established by the middlemen can be accepted or the goods can be withheld; this tends to be true for many agricultural, mined, and manufactured goods. In many other businesses, however, a process of bargaining takes place in which the producer fares well or ill according to his strength or weakness in the situation. In any event certain dominant considerations enter, among which are the requirements of the production program. A typical large-scale business must be kept going. Idle plant, machinery, and operating forces create expenses many of which continue whether the organization is busy or idle. Such expenses (insurance, taxes, officers' salaries, et cetera), ordinarily called *overhead*, are fairly constant whether the output is large or small.

In order to keep the plant going prices must often be kept low, so as to dispose of the output. But the extent of the production program is usually measured by the estimated price that is to be received. Once the production program has been determined, the cost per

unit of the product fixes the long-time lower limit at which goods can be sold. Whether the goods are sold to middlemen, as they usually are by farmers, or very nearly direct to consumers, as they are by most automobile companies, costs must be met. How much higher than the production costs the prices will be is determined by the relation that exists between the supply of and the demand for the goods.

Prices Fixed in Middlemen's Markets. It is in the markets where middlemen deal that we find the forces of supply and demand operating most freely. Here enter no considerations of a production program to be maintained, or of a standard of living to be attained by balancing the use of one good against the use of another. The middleman exists only to buy and sell and to profit by his activity if he can. To obtain profit, he expects to be able to buy low and sell high. His task is to anticipate all the influences that may cause a change in prices. He must estimate the effect upon prices of the expansion of demand, the shortage of supply, the whims of consumers, and the pressure of overhead costs. Once he has formed a judgment, it is his business to act. His job is risky, but he exists to take risks. If there were no risks, he would have no place in the economic system.

Prices in middlemen's markets are fixed by the purest higgling process remaining in our system. In the organized markets which have grown up around the middlemen's activities, goods and securities can always be bought and sold—at a price. But the prices are determined by the variables mentioned before: estimates of willingness to buy and estimates of costs to produce. Out of these markets usually come offers of prices to producers for their goods and offers of prices to retailers for the sale of goods. The markets of the middlemen form the center of the whole exchanging process around which our entire economic system is organized.

Interrelationship of All Prices. In the preceding sections, retailers', producers', and middlemen's prices have been considered separately because the ways in which they are influenced vary considerably. All three prices, however, have mutual influences. It is obvious that the price of wool affects the price of clothes, that the price of wheat bears *somewhat* on the price of bread. We must remember, however, that such influences are not definite and regular, and that they are effective only through the action of some person or group of persons.

Prices stretch like a network through our system, inclosing in their delicate threads goods, services, and persons. A touch anywhere is much like touching a tightly strung cord; the vibrations communicate themselves to its farthest limits. Impulses that cause vibrations may begin anywhere. A nature may set up repercussions with a frost or a thunderstorm. A rain in Nebraska has caused many a flurry in the

PRODUCE MARKETS

ENT
ZAT UP

Take the
sign

COTTON PRICES HIT
BY CROP ESTIMATE

Net Drop of 34 to 39 Points Fol-
lows Prediction of In-
creased Yield.

An increase of 90,000 bales in a month in the government's estimate of the cotton crop issued yesterday was larger than operators had expected and prices on the Cotton Exchange declined half a cent a pound under the heaviest selling that had been done in some time. As most private reports had reduced their figures, the trade had expected a slightly smaller estimate from the Department of Agriculture and a combination of liquidation and hedge selling after the figures were made known carried both December and January deliveries below the New York Scale buying orders for mill accounted for a partial recovery in the last hour and the market closed with a loss of 34 to 39 points on the day.

The fact that while the Crop Reporting Board reduces the indicated yield in Texas and the Carolina cotton harvest, the increase of the crop in Mississippi, Alabama and Georgia made necessary an increase of 47,000 in those States had a depressing effect on professional sentiment. The Census Bureau's figures showed a 2,000,000 bale increase for the period compared with 2,400,000 a year ago and 2,430,000 in 1927. The estimate to Oct. 1 was nearly a million bales in excess of that of a year ago and the quotations here follow:

	Oct. 1	Sept. 1	Aug. 1	July 1	June 1
Oct. 1	16.87	16.80	16.81	16.80	16.80
Nov. 1	16.87	16.80	16.81	16.80	16.80
Dec. 1	16.87	16.80	16.81	16.80	16.80
Jan. 1	16.87	16.80	16.81	16.80	16.80
Feb. 1	16.87	16.80	16.81	16.80	16.80
Mar. 1	16.87	16.80	16.81	16.80	16.80
Apr. 1	16.87	16.80	16.81	16.80	16.80
May 1	16.87	16.80	16.81	16.80	16.80
June 1	16.87	16.80	16.81	16.80	16.80
July 1	16.87	16.80	16.81	16.80	16.80
Aug. 1	16.87	16.80	16.81	16.80	16.80
Sept. 1	16.87	16.80	16.81	16.80	16.80
Oct. 1	16.87	16.80	16.81	16.80	16.80

If all forecasts were as reliable as these of the Department of Agriculture, price fluctuations would be reduced. But most forecasters are neither as scientific nor as disinterested as the Department. And even the Department makes errors of judgment. (From *The N. Y. Times*, October 9, 1929.)

affect us personally, but in a sense we all realize their serious nature and react to them in different ways. We welcome change or we resist it; we adapt ourselves quickly to the varied situations revealed in price movements or we refuse to be disturbed. On the whole, however, the industrial world is extremely sensitive to the indications of changes, and a large part of executive activity has to be directed toward meeting them. Not only must the producers and traders in goods be alert to price fluctuations, but workers also must watch their wage scales, and consumers must continually readjust their buying customs.

THE NEW

GOVERNMENT RAISES
COTTON ESTIMATE

Forecast of 14,915,000 Bales
Adds 90,000 to Indication
of September Report.

TEXAS YIELD IS REDUCED

Caroline Also Cut Down, but
Georgia, Alabama and Mississippi
Promise Better Than Month Ago.

WASHINGTON, Oct. 8 (AP)—A cotton crop of 14,915,000 bales this year was forecast today by the Department of Agriculture. The department said this was indicated by the condition of the crop on Oct. 1, which was 55 per cent of a normal. A month ago production of 14,825,000 bales was indicated on the condition of the crop Sept. 1, which was 50.4 per cent of a normal. Last year's crop totaled 14,478,000 bales and the condition on Oct. 1 was 54.4 per cent of a normal.

Forecast of production of the principal producing States compared with the estimate of a month ago and with their actual yield last year, as compiled from the census giving figures, was as follows:

	Oct. 1	Sept. 1	Aug. 1	July 1	June 1
Oct. 1	16.87	16.80	16.81	16.80	16.80
Nov. 1	16.87	16.80	16.81	16.80	16.80
Dec. 1	16.87	16.80	16.81	16.80	16.80
Jan. 1	16.87	16.80	16.81	16.80	16.80
Feb. 1	16.87	16.80	16.81	16.80	16.80
Mar. 1	16.87	16.80	16.81	16.80	16.80
Apr. 1	16.87	16.80	16.81	16.80	16.80
May 1	16.87	16.80	16.81	16.80	16.80
June 1	16.87	16.80	16.81	16.80	16.80
July 1	16.87	16.80	16.81	16.80	16.80
Aug. 1	16.87	16.80	16.81	16.80	16.80
Sept. 1	16.87	16.80	16.81	16.80	16.80
Oct. 1	16.87	16.80	16.81	16.80	16.80

BUSI.

CONC.
BUTTER, 100 LBS.
100 LBS.
100 LBS.

Fewer Buyers
Buyers in tow
ended yesterday
than those 10
week and fo
year. The 1
preceding wee
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due to the
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New Shad

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Store
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Chicago wheat pit. An individual may start them with a new invention, a speech, or a communicated idea. The price of rubber may be affected by the rumored invention of a cheap process for its manufacture. The price of textiles may change because an executive refused to be tactful in averting a threatened strike. A President may affect prices by affirming a belief in prosperity. As delicate as this and as subject to external influences is our system.

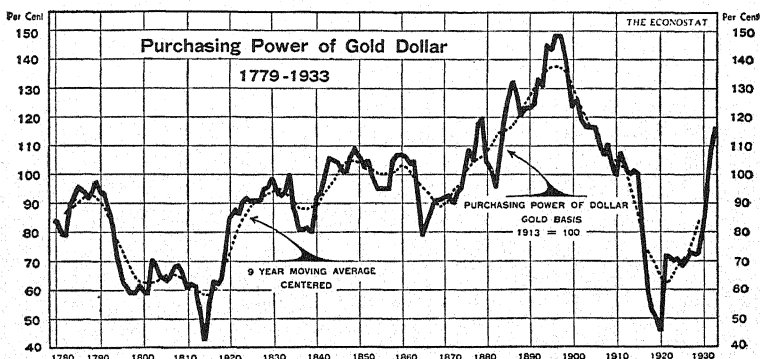
Need for Sensitivity to Price Changes. We do not often reflect that distant economic events may

MONEY AND THE SHIFTING LEVEL OF PRICES

Fluctuations in the Purchasing Power of the Dollar. We have shown that the price of an article is its exchange value in terms of dollars, and that prices rise and fall. Obviously this means that when prices are high a single dollar can purchase less than when prices are low. When hats sell for \$5 each, \$10 can buy more in the way of hats than when hats sell for \$10 each. And if the general level of all prices rises, the purchasing power of the dollar falls correspondingly.

Why the Dollar Fluctuates in Value. Price fluctuations are among the most complicated of economic problems. It will suffice here to offer a simple explanation of why the dollar has different powers at different times. This explanation may not be complete, but it explains why the purchasing power of the dollar would go up and down even if other varying factors were absent. That is enough for our purposes here.

During the entire course of the present century, until 1933, we were on the gold standard, our dollar being valued at 23.22 grains of



This chart shows the relation of the gold dollar to other commodities—the purchasing power of the gold dollar since 1780. (From *The Econostat*, July 8, 1933.)

gold. This means that a dollar gold coin (if such were in circulation) would have contained 23.22 grains of pure gold. The paper dollar had no intrinsic value, but represented 23.22 grains of gold obtainable

on demand from the national Treasury. Paper currency loses value when people believe that the Government cannot redeem it.³

Now gold, like every other useful commodity, fluctuates in value and price, depending upon supply, demand, and the other factors discussed above. Whenever something happens to make people willing to give less for 23.22 grains of pure gold than they have been willing to give before, the purchasing power of the dollar goes down. For example, the discovery of tremendous new gold deposits in our West would have tended to decrease the purchasing power of the dollar.

Measuring the Purchasing Power of the Dollar: Index Numbers. It is possible to take a normal year as the base, find out the prices of two hundred or more commodities, average these prices, and find an index of general prices during that year. This index may be called 100, or normal. In any succeeding year, an average of prices can be found, and this index can be expressed as a percentage of the normal year. For example, suppose that 1913 was a normal year and that the average price of the 200 commodities for that year was 40. Suppose that in 1932 the average price was 50. Now if we take 1913 as the base year, the index number for 1913 is 100. The index number for 1932 would be $\frac{50 \times 100}{40}$ or 125. This figure, 125, shows that prices in 1932 were one-fourth higher than in 1913, or that a dollar in 1932 would buy only four-fifths as much as a dollar in 1913.

Bad Effects of a Fluctuating Dollar. In this chapter, and in the preceding one, we have stressed the importance of price problems and price-forecasting in modern economic life. Changes in price between the time goods are produced and the time they are sold, between the time money is borrowed and the time for repayment—to cite common examples—disorganize industry and ruin many businesses, with attendant waste and losses. That is why industrial coördination is so difficult in a haphazard price system.

Suggestions for Remedying Fluctuations in the Dollar. Some economists say that instead of adopting a dollar based upon 23.22 grains of pure gold, and therefore a dollar that fluctuates in value, we should have a *goods* dollar, bearing a fixed relationship to the volume of goods in circulation. According to this plan the number of dollars

³ In 1933 the United States went off the gold standard. This will be discussed in Chapter XVIII.

in circulation would be changed periodically, based upon an index of goods, so that roughly the volume of goods would correspond directly with the volume of available dollars. Thus, it is claimed, year after year the dollar would always have a fixed purchasing power in terms of goods; if it were backed by gold, it would not always be backed by 23.22 grains, but by more or less gold according to the value of gold from time to time. This plan is sometimes called the *compensated dollar*.

The problem of industrial coördination cannot be solved merely by currency reform. While prices are uncertain, coördination is difficult. But if the other evils hampering coördination, as mentioned in this chapter, were removed even partially, the disasters of which price troubles are as much the manifestation as the cause would be lightened. The task of industrial coördination, related as it is to technological adjustments, business organization, government regulation, and the socialization of the profit-seeking motive, is much larger than the narrower, but important, question of currency reform.

SUMMARY

The obstacles to effective industrial coördination are of two major kinds. First, there is the technical difficulty of organizing an extremely complicated economic machine so that all the parts will be oiled properly and work smoothly in unison. It is the task of running a huge industrial enterprise magnified a millionfold and commanded by thousands of chiefs of staff. Granting that technical difficulties are surmounted, there arises the second obstacle, our competitive profit-seeking system, which has definite tendencies toward self-destruction rather than toward constructive coöperation.

The cost of high-power competition drives business toward consolidations or various forms of trade agreements. These developments offer *possibilities* of achieving coördination and reducing waste. Recognizing this fact, the law today sanctions more and more the so-called combinations in restraint of trade. In turn, large business units require an intensification of government regulation in the public interest. This means that courts, which now allow regulation under the public-utility concept, should expand their conception of public interest to include a wider range of economic affairs.

Price movements are an integral part of the problem of coördina-

tion. Business men must watch prices closely, and develop a keener sensitivity to price changes. Although much benefit may come from monetary reform aimed at abolishing fluctuations in the dollar, the larger task is to organize business so as to eliminate the maladjustments of which violent price changes are in part an index and in part a cause.

QUESTIONS AND PROBLEMS

1. What is meant by the *coördination of industrial groups*? Illustrate by an industry in your community.
2. Tell how coördination is related to interdependence. If industries were entirely independent of one another, would coördination be necessary? Explain.
3. Of the three types of coördination discussed in this chapter, which is the hardest to attain? Why?
4. Mention disasters that occur when there is lack of coördination. If possible, bring a newspaper clipping to class that depicts disasters brought about by such a lack.
5. How does exchange or trade bring about the coördination of industrial groups? Give an example.
6. Define *barter*. Would life be possible in a large city today if exchanges could be made only by barter? After thinking out your own answer, read Jevons's "The Difficulties of Barter," in Hill, *Readings in Vocational Life*, pp. 97-99. Then list as many distinct difficulties presented by barter as you can.
7. Trace an article in your living-room from the original producer to your home, illustrating the probable routes of transportation with a sketch map. List the different middlemen who probably played a part in bringing the article into your home.
8. List the reasons for exchange given in Adam Smith's "Teamwork through Exchange" and Charles Gide's "The Advantages of Exchange," in Hill, *Readings in Vocational Life*, pp. 95-97. Then tell about exchanges *that you have observed* which were caused by variations in tastes, regional differences, and specialization in industry.
9. Were the middlemen in the list you prepared in answer to No. 7 serving as coördinators of industrial groups? Find the paragraph in the chapter that best answers the question.
10. Are the following, when occupied in their customary daily activities, engaged in productive effort: a newsboy? the owner of a warehouse? a rural merchant? a locomotive engineer? a tourist? If so, what wealth do they produce or what service do they render? Be prepared to explain your answer in each instance.

11. Itemize what is included under the *middleman system*. Name other important agencies that assist in the coördination of industrial groups, explaining the work of each as a coördinator.
12. Why is competitive profit-seeking a serious obstacle to coördination? Do the two seem irreconcilable?
13. Does the need for coördination of industrial groups explain entirely the trend toward industrial concentration? What are other contributing factors? If all industries were united under one ownership and one management, would coördination still be necessary? Illustrate.
14. Does business consolidation decrease profit-seeking? Mention the newer forms of business coöperation.
15. What is the *rule of reason*, and how does it affect coördination? Tell why big business increases the need for government regulations.
16. What is the public-utility concept? Mr. Justice Holmes has said that businesses become "affected with a public interest" whenever people in large numbers come to think that they are. Do you agree? Is this the attitude of the Supreme Court?
17. *Special report for a volunteer*: The organization and activities of the Interstate Commerce Commission. Tell whether that commission serves as a coördination agency.
18. Explain the difference between *value* and *price*. Give examples. What is the relation between price and the coördination of industrial groups?
19. What is meant by *utility* or *value-in-use*? How does it set the limit above which prices cannot go?
20. What sets the limit below which prices cannot permanently fall? Tell why prices cannot fall permanently below the limit you mention.
21. Explain, with examples, the elements not included in your answers to Nos. 19 and 20 that affect the prices of commodities.
22. What is an *elastic demand*? an *inelastic demand*? Illustrate each. For which of the following is the demand elastic: salt, Rolls-Royce automobiles, potatoes, ice cream, sugar?
23. Explain and illustrate the difference between the *supply* of a commodity and the *quantity in existence*.
24. How does *demand*, as used by the economist, differ from *desire*? Tell what is necessary in order to change desire into demand. Mention ways by which merchants attempt to change desire into demand.
25. Can value be permanently fixed by government regulations? Give reasons for your answer.
26. Give examples of prices that are fixed largely (a) by retailers, (b) by producers, (c) by middlemen. In which market does higgling play the greatest part?
27. "Prices stretch like a network through our system, inclosing in their delicate threads goods, services, and persons. A touch anywhere is much

310 IMPROVING CONDUCT OF BUSINESS AFFAIRS

- like touching a tightly strung cord; the vibrations communicate themselves to its farthest limits." Explain this quotation, illustrating its meaning by items from the financial section of the daily newspaper.
28. Show how the dollar shrinks and expands in purchasing power. How do prices change under such fluctuations? What effects does a variable dollar have on business? Tell who is hurt more when the dollar shrinks, the debtor or the creditor. Why?
 29. Using the line graph on page 305, draw a line graph that will show the variations in the *general price* of commodities since 1780, measured by the gold dollar.
 30. What is an index number of prices? Of what use is such a number? Which would make the better basis for an index number, the wholesale prices of luxuries or the wholesale prices of necessities? Give reasons.
 31. How are fluctuating prices both causes and results of poor industrial coördination? Is specialization possible without coördination? Explain.
(For list of Readings in the Class Library, see the next chapter.)

Chapter 16

THE BUSINESS CYCLE: ITS EVILS AND PROPOSED REMEDIES

DESCRIPTION OF THE BUSINESS CYCLE

Business Fluctuations Are Not a Recent Phenomenon. Alternate periods of prosperity and depression have existed since the beginning of history. But for many centuries before the Industrial Revolution, men believed that prosperity was the normal state of business, interrupted by periodic crises at irregular intervals. Famine, pestilence, battles lost, the blunders of rulers, might cause these crises.

Rhythmic Character of the Business Cycle. After the coming of industrialism and the full development of a money economy, the up and the down movements in business have come at shorter intervals as one of the accompanying phenomena of the acceleration of all social changes. Only in recent years have economists observed that the movements have had a curious rhythmic aspect, upward toward a peak of activity and then downward toward a trough of stagnation. Prosperity is no longer regarded as the normal thing. What is normal is a series of successive cyclical movements, from prosperity to depression back to prosperity, and then the same thing over again. From this we get the term *business cycle*. The time and the extent of the cyclical swings have no exact correspondence with each other, but the general picture is one of continuous movement.

Downward Swing of the Business Cycle: Failure of Purchasing Power. To describe how the business cycle occurs, let us suppose a

FIGURE 21.--BUSINESS CYCLES IN THE UNITED STATES, SINCE 1855.

Expansion		Contraction		Duration in months		
Revival	High	Recession	Low	Ex-pan- sion	Con- trac- tion	Full cycle
January 1855 to June 1857	1857	July 1857 to Dec. 1858	1858	30	18	48
January 1859 to Oct. 1860	1860	Nov. 1860 to June 1861	1861	22	8	30
January 1861 to April 1865	1865	May 1865 to Dec. 1867	1867	46	32	78
July 1868 to June 1869	1869	July 1869 to Dec. 1870	1870	18	18	36
January 1871 to Oct. 1873	1873	Nov. 1873 to Mar. 1879	1879	34	65	99
April 1879 to Mar. 1882	1882	Apr. 1882 to May 1885	1885	36	38	74
June 1885 to Mar. 1887	1887	Apr. 1887 to Apr. 1888	1888	22	13	35
May 1888 to July 1890	1890	Aug. 1890 to May 1891	1891	27	10	37
June 1891 to Jan. 1893	1893	Feb. 1893 to June 1894	1894	20	17	37
July 1894 to Dec. 1895	1895	Jan. 1896 to June 1897	1897	18	18	36
July 1897 to June 1899	1899	July 1899 to Dec. 1900	1900	24	18	42
Jan. 1901 to Sept. 1902	1902	Oct. 1902 to Aug. 1904	1904	21	23	44
Sept. 1904 to May 1907	1907	June 1907 to June 1908	1908	33	13	46
July 1908 to Jan. 1910	1910	Feb. 1910 to Jan. 1912	1912	19	24	43
Feb. 1912 to Jan. 1913	1913	Feb. 1913 to Dec. 1914	1914	12	23	35
Jan. 1915 to Aug. 1918	1918	Sept. 1918 to Apr. 1919	1919	44	8	52
May 1919 to Jan. 1920	1920	Feb. 1920 to Sept. 1921	1921	9	20	29
Oct. 1921 to May 1923	1923	June 1923 to July 1924	1924	20	14	34
Aug. 1924 to Oct. 1926	1926	Nov. 1926 to Dec. 1927	1927	27	14	41
Average duration				25.4	20.7	46.1
19 cycles, 1855 to 1927.....				22.8	16.5	39.3
13 cycles, 1885 to 1927.....						

This table, compiled by the National Bureau of Economic Research, has "marked off" into definite time periods the cycles which have occurred during the last seventy-three years. It is interesting to note how certain periods vary in length from the average for all the periods.

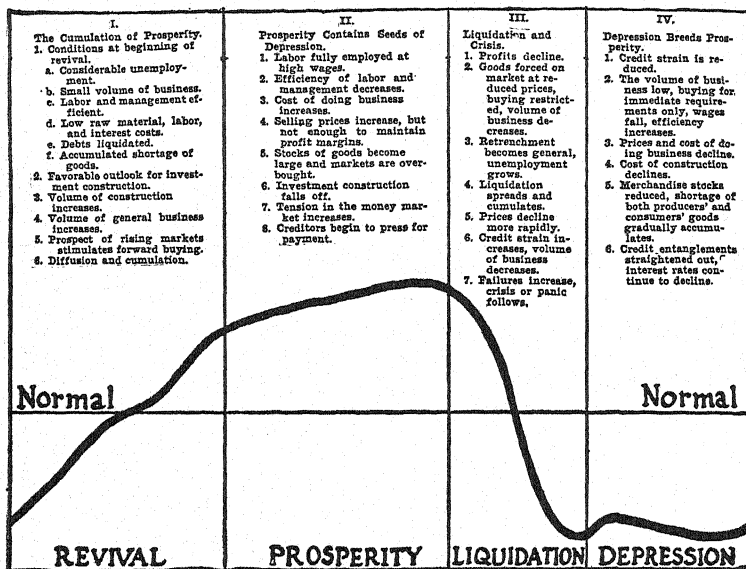
period of extreme prosperity. Then suddenly factories find their orders falling off and merchants cannot sell their goods at current prices. This decrease in trade occurs because people in general can no longer buy enough goods to keep merchants and factories active at prices high enough for everyone to make profits. Naturally the refusal to buy is first felt in the industries producing nonnecessities. But when automobile and piano factories close, whole sections of workers are thrown out of jobs and the income of these workers is entirely cut off. This reduces the purchase even of necessities, and the disturbance spreads, affecting all industries. Business eventually becomes so bad that millions are unemployed, many plants are idle or working part time, and destitution invades the working population. *The break in prosperity occurs, then, when consumers have not enough purchasing power to buy enough goods at such prices as to yield expected profits.*

Downward Swing: Failure of Credit. When the break in profits starts, it might be checked were it not for another break. Most business is done on credit, whether it be credit extended by one firm to another or credits extended by banks to industry in general. Credit is based on the capitalized value of present and prospective profits. If a bank lends a business \$1,000,000, it expects that firm to earn enough to repay the amount in full. When profits begin to waver, creditors fear that there will be no adequate assurance of repayment. Hence they refuse renewals of loans to enterprises that cannot stave off a decline in profits, and they press for the settlement of outstanding accounts. To settle their accounts, debtors are forced to *liquidate*, that is, they must convert their assets into cash, even at a loss. They in turn call upon those who owe them money. The total result may be a mild crisis or an absolute panic. Another effect of liquidation is to throw great quantities of goods into the market at lower and lower prices, which in turn make it harder for any firms to operate at a profit. *Thus another factor intensifying depressions is the reaction that occurs when forecasts of profits go wrong, since the whole business mechanism is based upon such forecasts. But it must be remembered that the forecasts go wrong because of a failure of purchasing power.*

Upward Swing of the Business Cycle. We have traced the course of the cycle from prosperity through liquidation to depression. During depression prices reach a low level, drastic reductions occur in

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the cost of doing business, profits are slight (or there may be losses), credit is granted conservatively, and goods are stored up with extreme caution. Finally, merchants dispose of the goods on their



An imaginary picture of the business cycle. (Printed by permission of Mr. Malcolm C. Rorty.)

overladen shelves. They put in new orders and cause factories to reopen. Optimism is kindled, the revival spreads into other fields, and the march toward prosperity is on.

CAUSES AND EFFECTS OF THE BUSINESS CYCLE

Causes of Depressions. In the foregoing discussion we said that the central starting-point of a break in prosperity is the inability of consumers to buy the goods which flood the market. However, this is merely a description, not an explanation. *Why cannot the goods be bought?*

1. *Lack of coördination of industries and competitive profit-seeking lead to overproduction of certain articles.* Firms are overoptimistic

as to the total market they can capture. As a result the market for certain commodities is flooded. Overoptimism leads also to over-estimation of prospective profits, which causes firms to borrow too much and also to undertake too much in the way of promises to pay dividends on preferred stocks and interest on bonds. Thus the first great cause of a business depression is the weakness in the processes of business management, discussed fully in Chapter XV. Improper business forecasting, however, is not the chief reason why consumers cannot buy the goods placed on the market.

2. *The chief cause of depression is lack of coördination between producing power and consuming power.* The amount of production is not determined simply by a forecast of what people will buy. It is determined also by what part of the national income has no use except to produce more goods. When a great part of the national income goes to a few people with high incomes, such people cannot use it all for consumption goods. They must *invest* it; that is, they must put it into stocks and bonds and so to work in factories producing more goods. In consequence, production increases at a tremendous pace. The amount

MILLIONS OF BUSHEL OF POTATOES IN MINN. WILL BE LEFT TO ROT

State's Crop 34,000,000 Bushels,
But Wholesalers Offer as Low
as 24 Cents to Farmers

Special Dispatch to the Evening Post
St. Paul, Minn., Aug. 25.—From present indications several million bushels of Minnesota potatoes will be left in the ground this fall. Prevailing prices do not warrant growers in marketing their entire crop, now estimated at around 34,000,000 bushels, in this State.

Wholesale dealers have been buying early potatoes as low as 24 cents a bushel, or considerably less than half what they brought a year ago. The late potatoes will begin coming on the market in about a month, and as they comprise the major share of the crop little hope for better prices is being held out.

In recent years potatoes have been a larger cash crop in Minnesota than wheat, but this year, even at the low

as wh is likely to regain the top

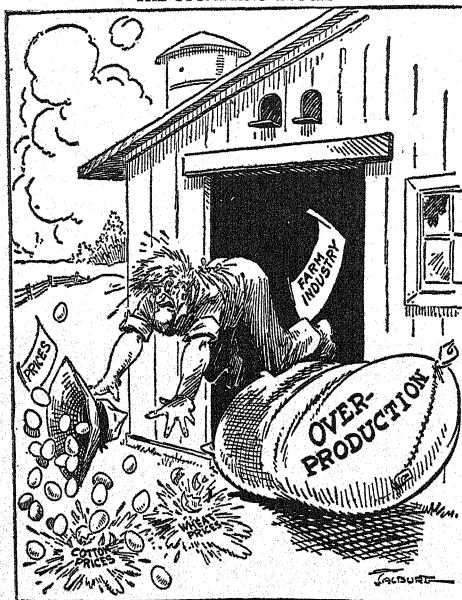
While we have never experienced general overproduction, it is certainly possible to grow more potatoes than Americans, accustomed to a varied diet, would want to eat under any circumstances. (From *The N. Y. Evening Post*, August 25, 1928.)

consequence, production increases at a tremendous pace. The amount

of consumption is limited by the incomes received by the masses of the people. If they do not receive enough to *buy* the goods produced by the factories, depression results from a lack of customers.

Statistics Show the Failure to Coördinate Production and Consumption. The detailed statistics given earlier in this book show how the distribution of income (purchasing power) is such as to make coördination between production and consumption well-nigh impossible. If you will turn back to Table 7 (p. 74), you will see that about 10 per cent of the population receive about one-third of the national income. If this one-third were distributed over the population as a whole, levels of living would be higher and more of the income would

THE STUMBLING BLOCK.



There is a whole lot more to the business cycle than the simple traditional explanation presented by this cartoon. (From *The World Telegram*, March 5, 1930.)

be spent for consumption goods in such a way as to tend to balance production with consumption. But when so much income goes to a few, they "save" much of it. They put it in banks and stocks, which means that it goes back into factories and mines to earn more money. Productive facilities therefore expand too rapidly to be balanced by the demand for consumption goods. This is shown admirably by Table 26 (p. 197) in Chapter X, where attention was called to the dangers resulting from an increase in productive machinery much greater than the increase in consumption goods.

Overproduction or Underconsumption? It is frequently said that business depressions are due to overproduction. The truth is that society has never known

a time when more goods were produced than people could *use beneficially*. More goods are produced than the majority of people can *buy*, but that is due to a poor distribution of purchasing power. What we actually have is not overproduction but underconsumption. It is strange how willingly, people accept the notion that millions must be destitute because there is too much food and clothing. Our advance in productive techniques make possible comfort and leisure for all society. To secure these ends the seeds of depression growing during prosperity must be killed. The tendency to build up fortunes and surpluses for investment faster than the levels of living of most people are raised must be checked.¹

Effects of Depressions. Almost every chapter in this book has stressed the evil effects of a great depression such as that which began in 1929. In Chapter V it was shown that if one-third of American families lived in poverty in 1929, one-half were on that level in 1933, an increase of about 5,000,000 families. It was shown also that the number of unemployed rose from about 2,500,000 in 1929 to over 13,500,000 in 1933. It has been indicated that the painfully slow progress made during three decades vanished almost overnight. No one can tell the amount of disease and crime that will result in decades to come from the denial and suffering of a great depression. That such conditions should exist when we have the physical wealth, the technical skill, and at least the beginnings of the social wisdom necessary to abolish them, is a stinging indictment of our economic society. What remedies for such conditions have been proposed?

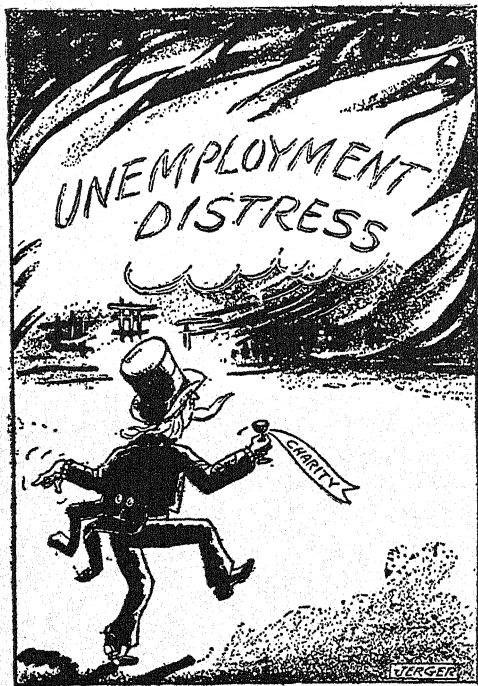
UNEMPLOYMENT RELIEF AS A REMEDY FOR THE EVILS OF THE BUSINESS CYCLE

Problem of the Unemployed. The people who suffer worst in times of depression are workers thrown out of jobs. Business men see their property depreciating in value, but if they remain on their feet—and most of the big ones do—returning prosperity restores values. The millions of workless men who face starvation for themselves and their families bear the real burden, and most proposals for relief are intended for this group. But it must be remembered

¹ Many reputable economists offer other explanations of the business cycle. For the most comprehensive treatment, see W. C. Mitchell, *Business Cycles*, National Bureau of Economic Research, 1927.

that permanently improving their condition is the way to restore health to the entire social organism.

Direct Relief of the Jobless. The simplest method of aiding the unemployed is by providing direct aid in the form of money, food, or lodging. By 1931 the depression had become so acute that for relief New York appropriated \$20,000,000, New Jersey \$10,000,000, and Pennsylvania \$10,000,000. Large-scale emergency relief programs were undertaken also by Ohio, Massachusetts, Wisconsin, Arkansas, Louisiana, Minnesota, Mississippi, South Carolina, and West Virginia. Investigations aiming toward



The saving grace. (From *The Unemployed*, Spring, 1931.)

relief were authorized in California, Maryland, Minnesota, Tennessee, and Wisconsin.² Private relief organizations, new and old, were active. In New York alone, the Gibson Emergency Unemployment Relief Committee campaigned to raise \$15,000,000 during 1932-33. By 1932 the ills of unemployment were so manifest that the Federal Emergency Relief Law of July 21 increased the funds of the Reconstruction Finance Corporation by \$1,800,000,000, of which \$300,000,000 were for loans to the states for unemployment relief.

Inadequacy of Direct Relief. The worst feature of direct relief is its

utter insufficiency to remedy want. For example, in New York, the wealthiest state and one of the most prompt in responding

² *Monthly Labor Review*, Vol. XXXVI, pp. 1288-89 (June 1932).

to social evils, testimony before a Congressional Committee in 1932 showed that

in New York City the monthly wage lost by reason of the present unemployment situation is between eighty and ninety millions of dollars. This is probably a minimum estimate. The largest sum that we have ever given in relief in any one month is \$4,000,000. In other words, it is perfectly clear that charity can never be substituted for the pay envelope. But the point I want to make is that between the spread of \$4,000,000 now paid monthly for relief and the eighty or ninety millions of dollars lost in wages, you have represented a great loss in the standard of living all the way from the individual who has simply to curtail his luxuries clear down to the person who has not enough to live on.

In January, 1933, the relief situation in New York City was summarized as follows:³

Heads of families unemployed (McKee police census)	391,600
Heads of families receiving home relief from city	134,600
Present city appropriation (month)	\$5,000,000
Average for those now receiving relief (month)	\$37.00
Unemployed heads of families not receiving relief, but in dire need	63,200
Total heads of families in dire need (those receiving relief and those not)	197,920
Average available per family, if all families in dire need received relief (month)	\$25.00
Average per family per month if city helped all 391,600 unemployed heads of families (the number approaching dire need is increasing daily)	\$13.00
Total city unemployed. (Gibson committee estimate)	1,150,000
Amount available for each unemployed, if all were helped by the city (per month)	\$4.60

I have not included here the Gibson committee fund. It aims to help a relatively few families (16,000 at present) and it cannot begin to touch the mountain of human misery that is New York City.

It is obvious that present city appropriations are so pitifully inadequate that they provide a starvation diet for one unemployed in every six in the city. Conservatively \$18,000,000 a month is needed to make an impression in this desperate situation.

³ By David Lasser, chairman of the Lower West Side Unemployment League. Quoted in the *New York World-Telegram*, January 19, 1933, p. 22.

By January, 1933, it became obvious that the \$300,000,000 unemployment relief measure passed by the federal Government in July, 1932, would be exhausted before the middle of 1933. It became apparent also that, although only thirty-six states had applied for federal aid during 1932, the remaining twelve, including the popu-



Even if these men all get their stomachs filled, is this an adequate substitute for the opportunity to earn a living for themselves and their families? (Photo Ewing Galloway, N. Y.)

lous states of New York, Massachusetts, New Jersey, and California, would be forced to fall into line during 1933. The inadequacy of a \$300,000,000 relief bill to help over 10,000,000 unemployed for an entire year is obvious. In May, 1933, the federal Government appropriated \$500,000,000 for grants to the states for unemployment relief. Within a few months it became clear that even this sum could care for only a small percentage of the most serious cases of destitution.

Other Evils of Direct Relief. Aside from its material inadequacy, charity is a poor substitute for normal income. So long as we live under a system where industrious men normally earn their bread by *working*, industrious men suffer degradation when they must exist by begging. Charity may not be a good thing for those who give it, either, because it may satisfy their consciences, so that they do not

feel the need to providing remedies for the evils which make charity necessary.

Another bad thing about direct relief is that it has almost no effect in curing or curtailing depressions. It begins to operate only after the catastrophe occurs. If we regard the failure to coördinate production and consumption as a chief cause for depressions, the amount given as charity is too small to redistribute purchasing power materially. Besides, charity is given in great part by people with moderate incomes, and thus their consumptive power is lowered. In New York City, for example, the city appropriation of \$5,000,000 a month to aid the jobless was accompanied by a \$20,000,000 cut in salaries paid to city employees, most of whom do not earn big incomes. Moreover, direct relief measures do not hit business men so severely in the form of taxes or otherwise as to prove a strong incentive to coördinate industry.

Direct relief on a scale many times as large as that provided in 1932 and 1933 would alleviate suffering substantially. It would also serve to raise consumptive power to a level with productive power, provided that the money for relief were drawn from the right sources by proper tax measures. Relief by such measures represents a difference in *kind* from any used so far; the proposal will be considered further when we discuss distribution of income.

Movement to Spread Employment. Another method of lessening the hardships of unemployment is to allot available work to as large a number of workers as possible. An outline prepared for President Hoover's Emergency Unemployment Committee in January, 1931, offered the following suggestions:

1. Available work may be spread over more men by shortening the day, by staggering, and by shorter shifts.
2. Industries may make personnel analyses in order to lay off first those men who are best able to stand unemployment.
3. Industries may assist those laid off by placement elsewhere, and by loans.
4. Industries may increase the amount of work available by more extensive maintenance and repair, by construction and by replacements.

In the middle of 1932, the spread-the-work movement was advocated by the National Conference of Industrial and Banking Committees, and was popularized by several leading industrialists.

Inadequacies of Spreading Work. The proposal to spread available work over more men is open to serious objections. In the first place, practically all of the wage-earning population must be supported by those who are actually employed. When depression brings a drop of 40 per cent in the total volume of wages, the workers as a whole suffer a corresponding drop in their level of living. This cannot be remedied by paying the same total amount of wages to a greater number of people, each working less and getting less. In the second place, spreading work shifts the entire burden of caring for the unemployed to fellow workers, who themselves have low earnings and are faced with the constant threat of inactivity. In the third place, since spreading work is left to individual businesses, the use of the plan depends primarily upon whether or not shorter shifts, staggering, and similar schemes decrease overhead costs and increase profits. If a plant can be run more effectively without spreading the work, there will be no voluntary spreading on the part of the owners. There is none generally, for in times of depression business men take every possible step to economize, and the actual working-hours of those employed full time are much longer than in good times. In the fourth place, spreading work does very little toward increasing total consumption power, and therefore does not help to coördinate production and consumption.

The proposal to lay off first those men best able to stand unemployment obviously does not remedy the situation. Furthermore, the war to decrease costs in times of depression usually leads to the discharge of the less efficient older workers, who are *least* able to stand it. Likewise, the attempt to place men in other jobs is largely futile when industries everywhere are on the decline.

The proposal that industries increase the amount of available work by more extensive repairs and by construction also offers little help. When industries cannot afford to employ men to make goods for sale, they can seldom afford to undertake improvements in equipment, for they must cut costs.

Private Voluntary Unemployment Insurance. Another method of lessening the evils of unemployment is by insurance. Trade unions in this country have occasionally paid unemployment benefits, but in 1931 only three unions and a few local branches did this, and these few organizations did not operate on a large scale. A small amount of insurance has been provided by agreements between unions and em-

ployers, whereby workers and employers contribute to a joint fund, and in 1931 fifteen business concerns provided insurance against unemployment for their workers. But most of these concerns were small. In 1930 the General Electric Company established a plan whereby workers paid 1 per cent of their wages and employers contributed an equal amount to a fund set up by the company. Under this plan an unemployed worker may receive benefits for a maximum of ten weeks in any one year. In 1932 the National Electric Manufacturers Association, the members of which employ 300,000 men and produce well over 80 per cent of the electrical goods of the United States, adopted the Nema Unemployment Benefit Plan, which is very similar to the General Electric scheme. Final adoption of the Nema plan depends on its acceptance by 60 per cent of the employees of the members of the association. On the whole private voluntary unemployment insurance has made very little headway.

Compulsory Unemployment Insurance: The Wisconsin Law. The movement toward unemployment insurance enforced by state law has made headway since 1929. In January, 1932, Wisconsin passed the first state unemployment insurance law, the chief provisions of which are as follows:

1. All employers employing ten or more workers are affected, but the law does not apply to farm laborers, domestic workers, public officers, teachers, interstate railway employees, persons in government unemployment-relief projects, nor to any worker unable or unwilling to work full normal time.

2. The contribution to the insurance fund is made entirely by the employer. It amounts to 2 per cent of the annual payroll for two years. After two years, it is reduced to 1 per cent of the payroll when the reserve equals \$55 per worker, and contributions cease when the reserve equals \$75 per worker.

3. The funds are administered by the State Industrial Commission, but there is no pooling of funds. Each business has its own fund, and workers can get benefits only from the fund set up by the business which employed them.

4. An unemployed worker receives \$10 a week or 50 per cent of his weekly normal wage, whichever may be lower, but in no event less than \$5 per week. A partially employed worker receives enough to bring his income up to the amount he would get if he were totally unemployed. No one may receive benefits for more than ten weeks in one year.

Although the Wisconsin plan alone was adopted before 1933, several other proposals have gained prominence. Two of these, the

Ohio and Michigan proposals, are practically alike, and will be referred to as the Ohio plan. Another proposal is that of the American Association for Labor Legislation. All of these plans are very similar to the Wisconsin law so far as the number of weeks during which a worker may receive benefits is concerned, and all of them apply to practically the same types of workers. All practically exempt the state from contributions. The Ohio plan, unlike the Wisconsin law and the American Association for Labor Legislation plan, makes the workers contribute 1.5 per cent of their wages to the fund. Some economists believe that if the employer is the sole contributor, the amount is taken out of wages anyway. Others say that wages are not affected, while a third group believes that wages are partially affected. It would seem advisable that those who manage industry should be penalized for the failure of the plan to operate smoothly, but until a number of plans are in operation in this country it is hard to be certain.

The unique feature of all of the plans is that they are aimed to secure prevention of unemployment as well as relief for it. One means of prevention is thought to lie in giving the employer an added incentive to keep men employed. Under the Association plan all employers pay the same rate, but rebates are given to employers who operate within industries in which employment is fairly stable. Under the Wisconsin law, as we have seen, contributions cease when the employer has set aside \$75 for each of his workers. If unemployment occurs, the fund is naturally used up in whole or in part, so that the reserve sinks below \$75 and the employer must start payments again. Under the Ohio plan, the rate of the employer's contribution varies from .5 per cent to 3.5 per cent of his payroll, depending upon the regularity of the industry of which his business is a part. Thus the Wisconsin law emphasizes that the employer is responsible only for conditions in his own business, while the other plans tax him more or less according to conditions in the industry as a whole, and for this reason may have an added value as an incentive.

The plans differ significantly as to pooling of funds. Under the Wisconsin law there is no pooling. Each worker must be cared for by his employer. Under the Association plan there is pooling of all the funds within each industry. Under the Ohio plan all funds are pooled, and all unemployed workers are cared for out of the general fund. It seems that, although the Wisconsin law stresses the individual responsi-

bility of each employer, it might be very hard on the unemployed, for the very business which has to curtail its operations greatly would be likely to be unable to keep up its unemployment fund once the fund started to diminish; moreover, the business might fail completely and the unemployed then would have no recourse. The Ohio plan provides greater security to workers in general, and the burden to employers, in that they must meet the costs of unemployment in other businesses, is partially relieved by the fact that the rates of contribution are lower for industries with good records.

Federal Government and Unemployment Insurance. In February, 1931, the Senate passed a resolution calling for an investigation of unemployment insurance. The committee that made the investigation found no basis for federal action, but it recommended that employers and employees in the various states be allowed to work out their own plans, and that each state should be free to decide how long it should wait before using some form of coercion. In a minority report Senator Wagner of New York advocated nation-wide compulsory unemployment insurance, supervised by the states and inaugurated under state legislation; he also advocated that the federal Government encourage the states in this project by establishing employment services and by income-tax allowances.

American Federation of Labor and Unemployment Insurance. For many years the American Federation of Labor opposed compulsory unemployment insurance, favoring instead voluntary agreements between unions and employers. In 1932, however, the Federation reversed its position and demanded compulsory insurance. In taking this step, the Federation fell into line with a growing body of public sentiment everywhere.

Inadequacies of Unemployment Insurance. In the last analysis unemployment benefits must be regarded as a palliative rather than a cure. Depressions affect the real earnings of the whole employee class. In 1933 the total volume of income paid to all groups of employees was over \$20,000,000,000 less than in 1929. If during the latter year each of the 12,000,000 unemployed received the maximum allowance under the Wisconsin plan (\$10 a week for ten weeks), the total benefits would be \$1,200,000,000, or about *one-sixteenth* of the lost purchasing power of all employees. Earlier in this chapter, it was pointed out that the monthly wage loss in New York City due to unemployment alone in 1933 as against 1929 was over \$80,000,000; this would be

\$960,000,000 in a full year. If each of the 1,500,000 unemployed in the state received the maximum \$100 relief during the year, this would amount to \$150,000,000, or less than *one-sixth* of the unemployment wage loss.⁴ It is true that the distribution of benefits would not be the same as the distribution of wage losses, but although this would make it easier for some, the arrangement would make it harder for others. And the most important result, from the standpoint of society, is the net loss in total income to workers as a whole. Furthermore, a depression extending over a number of years would exhaust funds and make it difficult to replenish them.

Inadequacies of Unemployment Insurance as a Preventive. Regarded as a preventive and curative measure, unemployment insurance may be useful in two ways. First, it may mitigate the failure of purchasing power, which, as we have seen, is a primary cause of depression; in other words, it may serve to help balance production and consumption. But the present proposals would fail to accomplish this result for the same reason that they fail to give enough relief; the sums available for benefits would be trivial compared to the total volume of wages and returns to capital. In addition, if the contributions made by employers to the reserve fund during times of prosperity are charged against wages, as some economists claim they would be, the ratio of wages to capital returns would be somewhat less than it has been in the past, and depressions might be hastened.

If, on the other hand, the contributions are actually made by employers, one of two results may take place. If the idle reserve fund is *invested*, it goes back into production and the excess of production over purchasing power continues. If the idle fund is *saved*, it would not increase production relative to consumption power. But this would be accomplished by curtailing a possible increase in production, which is a step backward, rather than by augmenting consumptive power, which is a step forward. In any event, unemployment insurance can do little to coördinate production and consumption directly.

The second way in which unemployment insurance might act as a preventive of unemployment would be by giving employers an

⁴ These figures illustrate the difference between the wage loss of the unemployed and the total wage loss. That is why the figures indicate that insurance would make up one-sixth of the loss due to unemployment, but only one-sixteenth of the loss due to all causes, including lower wages for those at work. Also, only a part of the unemployed are eligible for insurance under present plans.

additional incentive to coördinate industrial activity. Here again we must say at the outset that the contribution demanded is hardly enough to change the course of business policy. Wages are only a part of the cost of doing business and a 3.5 per cent addition to the cost in the form of insurance premiums is not enough to cause abandonment of deep-rooted practices at the heart of competitive profit-seeking. In the preceding chapter competitive profit-seeking was pointed out as the central obstacle to coördination, and in this chapter we shall return to a consideration of the contradiction between rendering socially worth-while services and making profits. But first we must continue the discussion of proposed remedies for unemployment.

As in direct relief, unemployment insurance on a greatly enlarged scale would cushion the blows of depression, and if drawn from the right sources would restore purchasing power and help to start the wheels of industry. But such a measure is not to be attained by the Wisconsin plan or by any other that has received widespread consideration.

Immediate Need for Relief Measures. Although the relief measures discussed above are inadequate as palliatives and ineffectual as preventives, they must be carried onward until better remedies are perfected. With destitution on every side, money must be raised to supply food and shelter. If jobs cannot be multiplied, they must be shared. If industry cannot run, it must insure to some extent those who suffer first and suffer most when stagnation comes. Unemployment insurance, in its mere recognition of industry's responsibilities, is a great step forward, and can accomplish a good deal of direct relief.

STABILIZATION OF INDUSTRIAL ACTIVITY AS A REMEDY FOR THE BUSINESS CYCLE

National Employment System. In 1933 the National Employment System Act was passed. It created a United States Employment Service in the Department of Labor to develop a national system of employment offices and to promote a system of public employment offices in the several states. The Service will coördinate the employment agencies throughout the country by supervising statistical procedure, furnishing and publishing information, and main-

taining a system for bringing jobs and workers together. Four million dollars per year until 1938 are made available, three-fourths of which amount is to be apportioned among the states on the basis of population. No state will receive a grant without matching it with local funds.

During the periods when unemployment is localized or seasonal, a national employment system can be very helpful in massing workers at points where there are the greatest opportunities for work. But when depression is world-wide and unemployment increases, the system can do little more than present statistical evidence which may cause people to seek additional remedies.

Public Works. For many years it has been urged that government should act as a balance wheel for industry by undertaking public-improvement projects as other businesses fall off and stopping such projects during periods of prosperity. In this way unemployed men can be absorbed and purchasing power through wages can be maintained without increasing the supply of consumers' goods upon the market.

In spite of the merits of this proposal it has been hard to put it into practice. During times of prosperity the national, state, and local governments do not—and should not—keep their money idle. They build roads and schools, and engage in all sorts of public services which we all welcome. When hard times come, government income, which is drawn largely from taxation, decreases tremendously. Incomes are smaller, property falls in value, taxable transactions are fewer. Business men call for reductions in tax rates and many public men call for economy in government. The governments must pay fixed interest rates on their bonds, although the value of the dollar has increased. Soon the governments are in a worse financial plight than are many large industries. In fact, however, governments can almost always borrow money at low rates of interest for public-works projects. The real problems are (1) to overcome the erroneous notions as to what constitutes sound economy in government, and (2) to provide for the repayment of the money it borrows for public works by a tax program which serves at the same time to bring about a better distribution of wealth. Such a carefully drawn public-works program gives employment, creates a demand for consumption of goods (thus stimulating industry), and helps to coördinate the returns to capital and labor.

National Industrial Recovery Act of 1933. By 1933 the depression became so threatening that a vast public-works undertaking was inaugurated by the National Industrial Recovery Act. A federal Emergency Administration of Public Works was established to prepare a comprehensive program including

1. Construction, repair, and improvement of public roads, public buildings, and any publicly owned facilities.
2. Conservation and development of natural resources, including control, utilization, and purification of waters, prevention of soil and coastal erosion, development of water power, transmission of electrical energy, and construction of river and harbor improvements.
3. Construction and repair under public regulation of low-cost housing and slum-clearance projects.
4. Construction, with the approval of the President, of naval vessels and aircraft.
5. A limited variety of private projects devoted to a public use.

There are made available to the President \$3,300,000,000 for the fulfillment of this program. He may proceed by way of federal construction, and by loans to states, municipalities, and to a limited variety of private concerns devoted to a public use and subject to government control. In addition, he may make outright grants to states and other public bodies in an amount not in excess of 30 per cent of the cost of labor and materials employed upon their projects. Thus assistance will be rendered to public bodies which have exhausted their own capacities for raising funds.

Other Public-Works Acts in 1933. The pressing need for creating employment opportunities led to the passage of two other important acts in 1933. The first is the Civilian Conservation Corps Act, which provides for the absorption of unemployment by means of reforestation projects. The second is the Tennessee Valley Authority Act. Both of these acts, however, are concerned primarily with the conservation and utilization of natural resources. They have been discussed in Chapter X.

Limitation of Public Works. While these measures are commendable, they are not sufficient to cure the evils of the business cycle. The public administration of about \$4,000,000,000, no matter how wisely spent, is a mere fragment of the total volume of industrial activity. The pride we may feel in raising such a large sum to combat

domestic misery is lessened when we think of the ease with which we raised many times this amount to combat those who were our enemies in 1917 and 1918.

In addition, there is need for a twofold expansion of the public-works idea. First, the concept of the stabilizing function of government as an emergency measure, which is to terminate within two years under the Recovery Act, might well be replaced by recognizing that government ought to act as a balance wheel *at all times* in order to promote industrial coördination. Secondly, the character of the function itself should be enlarged. Instead of embracing only the types of activity which have been regarded traditionally as public in their nature, it might be expanded to include an ever-widening group of industries, in response to the conditions of modern economic life.

THE BUSINESS CYCLE, COÖRDINATION, AND THE PROFIT MOTIVE

Coördination the Remedy for the Evils of the Business Cycle. In the preceding chapter coördination was considered as the task of producing the right amount of the right kinds of goods at the right time and price. In this chapter coördination is treated as a task of enabling the majority of consumers to command sufficient purchasing power to buy the goods that are produced. All the discussion thus far points clearly to the need of providing these two kinds of coördination in order to make the economic system operate effectively. What are the chief obstacles to such an achievement?

Profit-Seeking and Too Many Goods. There is no evidence that more goods in general can be produced than people can *use*. Human wants seem limitless; certainly our present national wealth could not be so distributed as to give people too many of the good things of life. But it is possible, of course, to produce too many of a special kind of article at a given time. How the competitive profit system brings this result is shown in the preceding chapter (page 290).

Profit-Seeking and Too Few Goods. Business men often find that they can make more money by producing fewer goods than society well might use. The managers of a factory capable of turning out a great volume of products often find that they can increase the net earnings of the business by stopping the plant at intervals, thus re-

ducing the output of the goods they make and thereby forcing people to pay more than they would otherwise have to do. This can happen, of course, only when a virtual monopoly of the product is in the hands of the managers of the business; but a virtual monopoly is not at all an unusual circumstance in modern industry, for such a monopoly need be only an arrangement that will effect a control of price, not one which brings all the concerns making the product under one ownership.

J. A. Hobson, a distinguished English economist, considers this problem in an article written before the depression of 1929. In speaking of productivity as the source of social well-being he says:

In nearly every European country the productive machinery is working slow, by reason of war and post-war damage to its finance, capital, labor efficiency, and markets. This damage is represented in unemployment, under-employment, and poor production. . . .

Even in America the machinery of production is wasting power, by low functioning of labor or plants, or both, by inferior technique and organization, unreliable finance, unsatisfactory transport and marketing arrangements. How big the total waste is, nobody can do more than guess, and the guesses vary from, say, 50 per cent to 200 per cent. If the natural and human economic resources of the country were fully utilized, even up to the highest standards of equipment and operation actually in use, is it too much to expect that the output of available wealth would be doubled? . . .

What holds us back from realizing this economy of high production? It is necessary, first, to make it clearly understood that the "holding back" is at all points a more or less conscious policy of men engaged in industry. Restriction of output, for prolongation of the job, for spreading employment, sometimes also from laziness or for a check on "profiteering," is charged against the individual workman or the labor unions in many trades, with a considerable element of truth. Though, as we see, other motives may enter, the main pretext for this . . . is the belief, often well-founded, that markets furnish no security for full continuous employment, and that, if they put out too much work, short time or stoppage will ensue. . . .

But what of the business men themselves who never tire of urging workmen to put forth their utmost energy so as to keep down costs? In times of rising prices and high profits they seek, indeed, to run their plants at high pressure. But at the back of their minds there is always a haunting fear, based upon long experience, that this policy of maximum production cannot last, that prices will soon decline, contracts fall off, profits disappear unless they and their competitors arrange to slacken the rate of output. This plainly recognized need to limit output, in order to maintain a reasonable

level of prices and of profits, is the main incentive to the formation of trusts, combines, associations, agreements, by which cutthroat competition is suspended or displaced in most organized trades. The management of machine industry continually keeps a watchful eye upon the markets lest they show signs of being overstocked, in which case some slowing down of production will be expedient. Just as the worker fears the cutting of wages if he works too fast, so the employer fears the cutting of prices if his plant turns out too much. . . .

For it is not the niggardliness of nature nor the backwardness of science nor the inefficiency of labor that checks productivity, but the refusal of man to set science to do her best with nature. Employers, workers, politicians conspire to hold back productivity and so halve the real income they might enjoy. Why do they do it?⁵

Profit-Seeking and Inferior or Useless Goods. Profit-seeking also leads to supplying society with inferior goods. Often it may be profitable to make inferior articles which have to be replaced frequently rather than to make sturdier articles. Sometimes, too, goods that are positively harmful are made simply because they yield a profit.

By socially useless goods, we may mean goods which tend to increase an individual's profits at the expense of a competitor without helping society in any way. The most common example is the advertising which seeks to divert trade from one brand of goods to another, when the two varieties are practically identical. Billions are spent yearly to secure market preferences when it makes no difference to society which articles are purchased. This is indeed, as Stuart Chase says, "a tragedy of waste."

Making Goods and Making Money. We see on every hand the conflict of interest between social well-being and profit-seeking. The effort to organize industry so as to raise levels of living would seem to require, as one of its very first objects, the production of goods to meet needs rather than to make profits. Management would then confine itself to its real job of directing production in the public interest rather than to subordinate every aim to private profits. The failure of our complicated industrial order to operate satisfactorily under the profit system is powerfully depicted by Thorstein Veblen, one of the most brilliant and ironic of American economists:

⁵ J. A. Hobson, "The Cry for Productivity," *The Nation*, Vol. CXX, pp. 290-91 (March 18, 1925). Quoted by permission of the author and the editors.

In effect, the progressive advance of this industrial system towards an all-inclusive mechanical balance of interlocking processes appears to be approaching a critical pass, beyond which it will no longer be practicable to leave its control in the hands of business men working at cross purposes for private gain, or to entrust its continued administration to others than suitably trained technological experts, production engineers without a commercial interest. What these men may then do with it all is not so plain; the best they can do may not be good enough; but the negative proposition is becoming sufficiently plain, that this mechanical state of the industrial arts will not long tolerate the continued control of production by the vested interests under the current business-like rule of incapacity by advisement.⁶

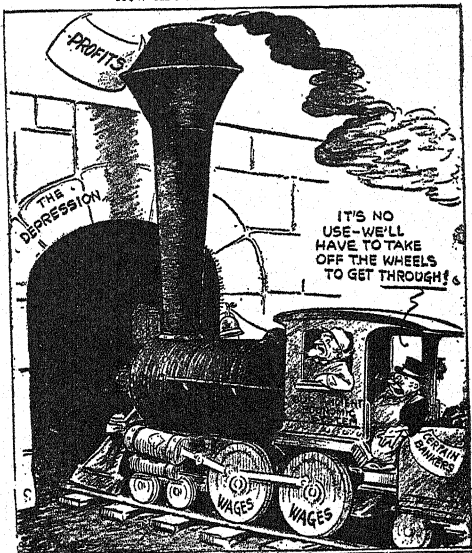
Profit-Seeking and the Task of Coördinating Production and Consumption.

It is fairly obvious, as has been shown, that the profit motive interferes with the task of giving consumers sufficient income to buy the proper amount of the proper kinds of goods, for the less wages an employer has to pay in order to get effective services, the greater profit will he make. Certain economists say that competitive

profit-seeking employers keep wages down to a subsistence level. Others say wages tend to follow standards of living. Still others say that wages depend upon the bargaining power of labor. In any event, business carried on for profit generally tries to regulate wages so as to increase profit rather than to coördinate production and consumption.

⁶ Thorstein Veblen, *The Engineers and the Price System*, B. W. Huebsch, 1921, p. 58.

HOW ABOUT THAT SMOKESTACK?



This advice was followed when the depression started. (From *The World Telegram*, April 11, 1930.)

The results of the policy of profit-seeking have been amply illustrated. It is important to note that the policy not only injures employees, but also brings on a decline which finally injures employers as well.

When we come to consider proposals for economic reform we shall see that they center about the two problems of coördination: (1) adjusting production to human needs, and (2) adjusting consumption power (in terms of income) to production.

SUMMARY

When coördination of activity within the economic system becomes so faulty that there is a breakdown, more or less serious, depression is at hand. The *business cycle* is the term used to describe the movement from prosperity to depression and back again.

The chief causes of depressions seem to be (1) overproduction of specific articles due to poor coördination within industry and (2) failure of coördination between production and consumption due to faulty distribution of purchasing power. When depression comes, the chief immediate task is to care for the unemployed. Direct relief does not supply enough money to help very much, and has no curative value. Spreading employment is a negligible remedy. Voluntary unemployment insurance has made little headway. Compulsory unemployment insurance seems likely to gain increasing support. Although it is neither a satisfactory palliative nor a satisfactory preventive, it may relieve the acute suffering of part of the jobless population. Stabilization of activity by means of public works is a remedy gaining increasing favor, and the public-works concept needs constant expansion.

Permanent, effective remedy lies in removing the fundamental causes of the business cycle. The attainment of coördination is partly a technical undertaking, but it is chiefly a task of substituting the public-spirited management of both the productive and the distributive machinery of the economic system for unbridled competitive profit-seeking.

QUESTIONS AND PROBLEMS

1. Tell what is meant by the statement that the movement of the business cycle is rhythmic.
2. What are the stages of the business cycle? Why is the order of the stages

always the same? Since the order is always the same, why can we not tell when a depression is coming?

3. What two types of faulty coördination are primary causes of the cycle?
4. Is general overproduction possible? Is there any such thing as overproduction in specific goods, aside from a failure of purchasing power? Why?
5. If the total national purchasing power is sufficient to buy all the goods produced, what difference does distribution make in so far as coördination is concerned?
6. What is there about our present business system that causes production to outstrip consumption?
7. Has this book presented statistical evidence showing that the present distribution of income puts obstacles in the way of coördination? Mention all the types of evidence presented.
8. What significance lies in the fact that during 1922-29 machinery was produced much faster than consumption goods?
9. What people are injured most by depressions? Why are their injuries irreparable?
10. Explain the shortcomings of direct relief to the jobless.
11. Why must spreading employment fail to help appreciably the condition of the working class as a whole? Is there likely to be much spreading of employment? Give reasons.
12. What is the extent of voluntary unemployment insurance?
13. Outline the Wisconsin Compulsory Unemployment Insurance Law. In what important respects do other proposals differ from the Wisconsin law? State the advantages of each.
14. How might the reversal in attitude of the American Federation of Labor toward unemployment insurance be explained?
15. *Question for debate: Resolved*, That a federal compulsory unemployment insurance act is advisable. In the light of the discussion of child-labor laws and price-fixing, how might the Constitution present difficulties to such a law?
16. What are the provisions and the potentialities of the National Employment System?
17. Discuss public works as a cure for unemployment. If governments always had money available, do you think that public works would remedy the business cycle? Why?
18. Outline the public-works provisions of the National Industrial Recovery Act.
19. What is the main obstacle to coördinating economic activity?
20. Of the two major types of coördination necessary, which seems to you to be less probable under the dominance of the profit motive?
21. Has this book given examples of coördination promoted by the desire for profits? If so, point them out.

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22. What ways have been suggested in this book of making coördinated activity serve the public interest without abolishing or seriously limiting the profit motive?
23. Do you think satisfactory coördination possible in an economic system that is dominated by the profit motive? Give reasons.
24. Compare the public-works concept with the public-utility concept.

READINGS IN THE CLASS LIBRARY

- *1. "Teamwork through Exchange," Adam Smith, Hill, *Readings in Vocational Life*, pp. 93-95.
2. "The Advantages in Exchange," Charles Gide, *ibid.*, pp. 95-97.
3. "A Billion Wild Horses," Chase, *Men and Machines*, pp. 337-48.
- *4. "The Organization of Production," Clay, *Economics*, pp. 46-63.
5. "The Measurement of Changes in the Level of Prices," *ibid.*, pp. 195-203.
6. "Unemployment and Overproduction," *ibid.*, pp. 229-41.
7. "The Effects of the Panic of 1837," F. Marryat Forman, *Sidelights on Our Social and Economic History*, pp. 155-59.
8. "The Panic of 1857," H. M. Hyndman, *ibid.*, pp. 160-63.
9. "The Mail-Order House," Arnold Bennett, Center, *The Worker and His Work*, pp. 42-45.
10. "Shipping," A. A. Coates, *ibid.*, p. 277.
- *11. "Middlemen and Organized Markets," Patterson and Scholz, *Economic Problems of Modern Life*, pp. 40-53.
- *12. "The Problem of the Business Cycle," *ibid.*, pp. 271-90.
13. "The Panic of 1837 and Its Effects," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 499-503.
14. "The Panic of 1873," J. J. Knox, *ibid.*, pp. 729-32.
15. "The Panic of 1907," *ibid.*, pp. 734-37.
16. "Exchange and Marketing," Marshall and Wiese, *Modern Business*, pp. 223-60.
17. "Administration of Marketing," *ibid.*, pp. 263-98.
18. "The Phoenicians Were the Original Traveling Salesmen," Hayward and Johnson, *The Story of Man's Work*, pp. 59-66.
19. "How the Work of the World is Performed Today," *ibid.*, pp. 193-98.
20. "How Goods Are Bought and Sold," Wells, *The Work, Wealth and Happiness of Mankind*, Vol. I, pp. 245-58.
- *21. "The World Depression of 1929," *ibid.*, pp. 434-54.
22. "Newville Dye Works," Weld and Tostlebe, *A Case Book for Economics*, pp. 172-74.
23. "Production for a Market," *ibid.*, pp. 180-83.
24. "Business Cycles," *ibid.*, pp. 205-90.
25. "Adventures in Fish Bait," *ibid.*, pp. 269-70.

Chapter 17

BALANCING AGRICULTURE AND INDUSTRY

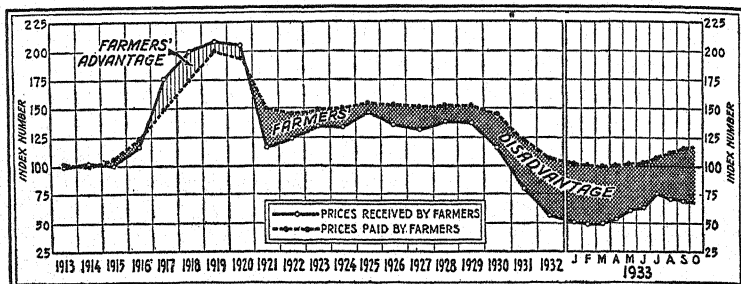
THE FAILURE OF AGRICULTURE TO PARTICIPATE IN PROSPERITY, 1922-1929

Failure to Coördinate the Rewards to Agriculture and to Industry. In the preceding chapter we pointed out the dangers that come from lack of balance between the reward to ownership and the reward to labor during the prosperity era ending in 1929. We shall now consider the maladjustment that arose during the same period between the reward to agriculture and the reward to industry. In one respect at least the latter problem is more serious than the former. From Chapter V on urban poverty you will remember that the real income of industrial workers increased rapidly during good times, and from Chapter IV on rural poverty that the income of the farmer actually declined sharply during these years; he did not participate at all in prosperity. Hence the need for coördinating agriculture and industry has been more and more insistent, beginning in 1921.

Decline in Agricultural Income and Wealth, 1920-1929. In the chapter on urban poverty it was pointed out that our national income rose from almost \$66,000,000,000 in 1922 to almost \$90,000,000,000 dollars in 1929, and that industrial wage-earners participated in this advance to such an extent that real wages rose over 30 per cent. During these years what was the situation with agriculture? In Chapter VIII it was indicated that agricultural production improved less rapidly than industrial production, but nevertheless made a gain of 16 per cent from 1922 to 1929. But in spite of this increase in production our national farm income fell from about \$15,000,000,-

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000 in 1920 to less than \$10,000,000,000 in 1929, and the value of farm lands declined from \$66,000,000,000 to \$48,000,000,000. During the same period, almost 500,000 farmers lost their lands. Farm bankruptcies, which had averaged 1.5 for every 10,000 farms during the



The dismal story of the agricultural decline since 1920 is a history of price movements. (From *The N. Y. Times*, October 29, 1933.)

years 1905-14, rose to over 100 per 10,000 farms for every year since 1922.¹

Declining Ratio of Farm Prices to Other Prices, 1920-1929. The situation of agriculture is clearly indicated by index numbers showing the change in the purchasing power of the farmer's dollar. The money income the farmer received for his produce had far less purchasing power in 1929 than in 1920, as is revealed in the following table:

TABLE 30

INDEX NUMBERS MEASURING CHANGES IN FARM PRICES AND IN THE PER UNIT PURCHASING POWER OF FARM PRODUCTS, 1920-1929 ²

Year	Prices Received by Farmers	Prices Paid by Farmers	Purchasing Power of Farm Products
1920	205	206	99
1921	116	156	75
1922	124	152	81
1929	138	155	89

This way of looking at the agricultural problem in terms of prices will be helpful when we come to consider remedies for the farmer's ills.

¹ See *Recent Social Trends*, Vol. I, pp. 498 *et seq.*

² Adapted from F. C. Mills, *op. cit.*, p. 210.

THE FARMER'S PLIGHT SINCE 1929

Intensifying Maladjustment between Agriculture and Industry. From 1930 to 1932 the national farm income dropped \$2,500,000,000. The farmers' purchasing power, which reached a high mark of \$16,-000,000,000 in 1919, was only \$5,000,000,000 in 1932. This loss of \$11,000,000,000 is equal to one-fourth of our national total of retail sales. The dizzy decline in farm prices reduced the purchasing power of the farmer's dollar from 89 in 1929 to 80 in 1930, to 62 in 1931, and to 48 in June, 1932!³ Furthermore, the farm mortgage debt was \$9,500,000,000 in 1932, and on over 30 per cent of the mortgaged farms, the farm was worth less than the mortgage.

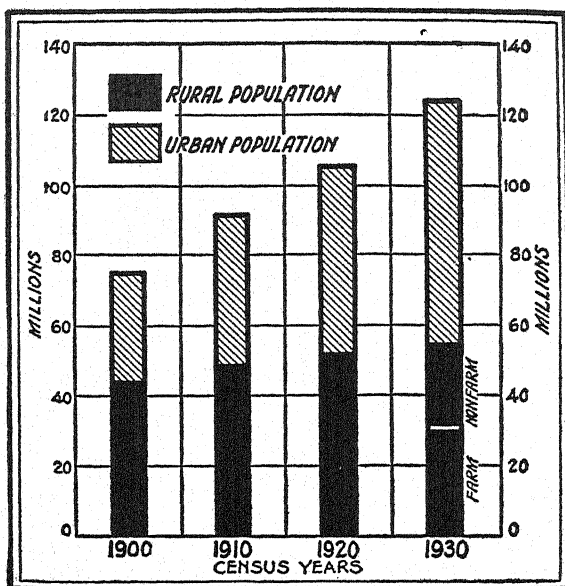
Consequences of the Long Agrarian Depression. The failure of agriculture does not place hardships upon farmers alone. Less than one-third of the population live directly by the soil, but most American small towns and a great many cities are supported by the farm areas which they serve. Farmers are large purchasers of equipment and consumption goods. Over half of the mortgages on farm property are held by insurance companies and banks, both of which are seriously threatened when they cannot collect the money which they have loaned. Foreclosure upon farm property leaves them with holdings that they are unable to use and cannot dispose of until conditions improve. Through the danger to these institutions, innumerable investors are threatened. Moreover, agriculture is our basic industry, and a prosperity built upon impoverished farmers is built upon sand. Many capable critics believe that the failure to co-ordinate the rewards to farming and industry was a central cause of the depression of 1929. In much the same way that the failure of wages to rise as rapidly as corporate profits made the industrial worker unable to buy the goods the factories put on the market, so the failure of agricultural purchasing power cut down the outlet for manufactured and retailed goods which the farmer wanted but could not buy.

But aside from the effects of the agricultural decline upon the nation at large, the farmer's plight must cause concern. The farm population was 27,000,000 in 1930, or over 22 per cent of the nation. Since that year the depression has caused a steady flow of people back to rural life, so that by 1932 it was estimated that there were well over 30,000,000 people on farms—more than ever before.⁴ Earlier in

³ *Recent Social Trends*, Vol. I, p. 501.

⁴ *Ibid.*, pp. 502-03.

this book the wide extent of rural poverty before 1930 was described. A keen imagination is not needed to grasp the effect upon rural levels of living of a collapse in agriculture such as has occurred during the



There are enough farmers and rural dwellers dependent on farm prosperity for the whole nation to be vitally concerned about their welfare. (From *The N. Y. Times*, January 8, 1933.)

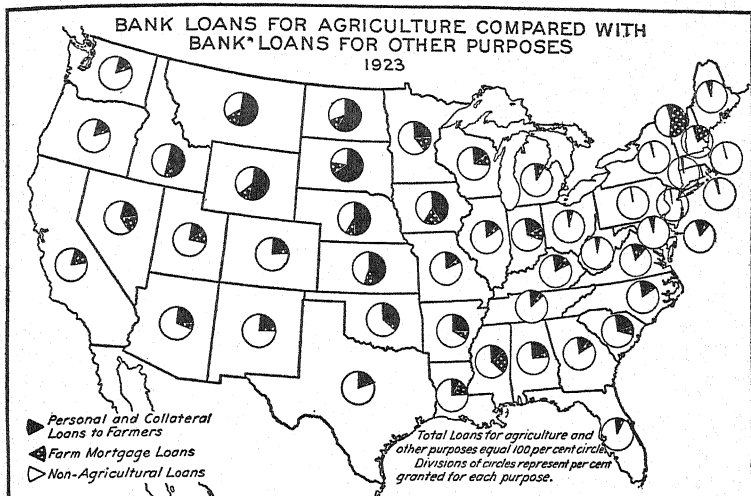
past few years. Farmers have lost more than money; they have given up the independence which was so long valued in American life. In 1900 about 35 per cent of all farmers were tenants, in 1925 about 38 per cent, and in 1930 over 42 per cent.⁵ By 1933, farm tenancy had risen further, probably to over 50 per cent.

EARLIER REMEDIES FOR AGRICULTURE: CREDIT FACILITIES

Need for Helping the Farmer. For many years it was said that the farmer must help himself by improving his production and marketing methods and by reducing his operating costs. Today these remedies

⁵ *Ibid.*, p. 505.

have been tried, but have failed to meet the situation. It is true that agricultural technique has not advanced as rapidly as industrial, but this is due to the nature of agriculture rather than to the nature of



Every credit institution in the country is gravely affected by the inability of farmers to pay their debts. (Courtesy U. S. Dept. of Agr.)

farmers. People realize now that the nation must have agriculture, and that if this yields small profits or if farmers cannot battle unitedly for high prices because they live far apart, these disadvantages should be carried by the country at large. Opinions differ only as to how best to assist the farmer.

Need for Credit Facilities. Most business operates with the use of borrowed money. This is particularly true of agriculture, because the farmer has a slow turnover. A merchant may sell his goods the day he buys them and thus get his money back at once. But a farmer has to buy seed and fertilizers and implements, build barns and silos, till the soil, and then wait months before his crops are ready for market. Despite these needs the farmer in the past found it hard to secure adequate credit facilities, and much effort was directed toward providing him with them.

Frequently, during periods of depression in farming, country banks have found themselves loaded with *frozen assets*, that is, they have

made loans that farmers could not pay, although the security back of the loans was sound. The reason for the freezing of farm credit is not hard to understand. When prices for farm products and farm land are high, bankers make loans to farmers on the security of property mortgages. If before the loan is discharged depression comes on with falling prices and a poor market, the farmer can sell his products only at prices far below what he had expected to receive; he is therefore unable to pay his debts. The farmer finds, to his dismay, that he has borrowed cheap dollars and must pay up with expensive dollars.

Ordinarily foreclosure of the mortgage would result from inability to pay, and the bank would be paid out of the proceeds of the sale of the farm; but even though the loan may have been conservative and amount to only 50 or 60 per cent of the ordinary value of the property, prices may have fallen so low that even this amount could not be obtained. Under such circumstances it would be useless for the bank to foreclose, and the institution therefore has no alternative except to renew the loan. Eventually the situation may become so bad as to cause the bankruptcy not only of the farmer but also of the bank. Country banks have suffered so frequently from such difficulties that they have been forced to exercise extreme caution in making farm loans.

A country bank, naturally, always has other uses for whatever funds may be at its disposal. It has one or more correspondent banks in urban centers with which it exchanges funds. Normally the arrangement operates to build up loanable funds in country districts during the harvest season, when the demand is greatest, and to form an outlet for the surplus funds of country districts during other seasons of the year. Usually, however, funds tend to move toward places where profits and interest rates are highest and where loans are repaid with the greatest promptness. Farming generally cannot be compared with other industries in any of the foregoing respects, and funds therefore tend to flow from the country to the urban centers and to remain there.

Federal Farm Loan System. Neither the old banking system nor the Federal Reserve plan provided adequately for the needs of agriculture. The farming industry has slow turnovers, its overhead costs are high, it is mostly noncorporate in form, and it is scattered over a wide, thinly populated area. A banking system intended to meet

the needs of city commercial businesses therefore falls short in service to agriculture.

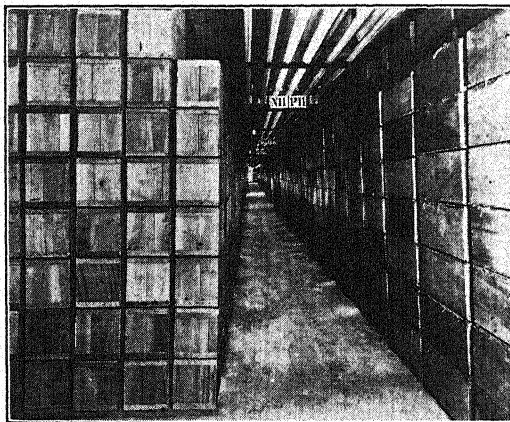
The first attempt in recent years to provide suitable credit facilities for farmers was the establishment in 1916 of the Federal Farm Loan system, which was intended to correspond roughly with the Federal Reserve system for business men. The country was divided into twelve districts, each containing a Land Bank, with central authority in a Farm Loan Board. Farm loan associations, somewhat similar to the member banks of the Federal Reserve system, might be established by the farmers themselves. The land banks were authorized to obtain funds by the sale of farm loan bonds, and loans were to be made to farmers on mortgage security up to 50 per cent of the value of the land and 20 per cent of the value of its improvements.

A series of joint-stock land banks were also authorized by the law. These institutions were to be private corporations loaning directly to borrowers at a limited rate of interest funds obtained by capital stock issues and the selling of bonds. The growth of the system has been slow but steady; it has rendered a real service in granting mortgage credits.

Agricultural Credits Act of 1923. But mortgage credits alone are not sufficient to solve the financial problems of agriculture. What farmers, as well as other business men need, is credits suited to their operations—credits that will enable them to borrow funds at a low interest rate at the beginning of productive operations, to be repaid when the goods have been produced and sold. Ordinary banks perform this function for commercial and manufacturing businesses. But farmers need to borrow for longer terms than urban business men, and the customary thirty-day to ninety-day periods for loans do not answer their needs. They also require a lower rate of interest than is charged for commercial loans.

Discussion of the foregoing problems finally resulted in the Agricultural Credits Act in 1923. Under this act twelve banks, similar in structure to the Farm Loan system, were set up under the name Federal Intermediate Credit Banks for the purpose of granting credit for periods of from six months to three years by discounting notes that originated as advances for agricultural operations. The stock of the credit banks was to be subscribed by the national Government; the banks were to issue bonds to obtain loanable funds.

The total loans outstanding indicate that the credit banks have not yet rendered any great service. This is due perhaps to overconservative management or to unwillingness to lend to farmers on the



The egg room in a cold storage plant. Providing facilities whereby the farmer may save his produce for a more favorable marketing time has been a part of every governmental plan to aid agriculture. (Courtesy U. S. Dept. of Agr.)

same basis that loans are made to other businesses. The farmers' need for intermediate credit can be met in either of two ways. Agriculture may adapt itself more and more to the model furnished by other businesses; its credit needs can then be met by the system set up for that purpose. Or new credit devices can be developed to meet the peculiarities of agriculture. Such was the purpose of

the legislation of 1916 and of 1923, when a crisis in farming occurred and when national sympathy was aroused. But neither arrangement went far enough, for mortgage credit is insufficient for agricultural needs. It may help a farmer buy land, but it cannot finance his productive operations.

Agricultural Marketing Act of 1929. The system of agricultural financing described above was supplemented in 1929 by a \$500,000,000 loan fund set up by act of Congress. The act provided that interest should be at the rate of 4 per cent or less. Wide discretionary power was vested in a Farm Board appointed by the President; nearly anything in the way of financial support which this board felt desirable could be furnished.

The main idea behind the law was that farmers suffer a needless disadvantage in marketing because they operate both inefficiently and on too small a scale to bargain effectively with the buyers of farm products. Government help, it was maintained, is needed only

to assist them in becoming stronger through the development of coöperative associations. The intention was to assist farmers by cheap credits so that they might eventually become strong competitors in the business conflict.

The act of 1929, then, was primarily for the purpose of bettering the situation of farmers in the market. If the Farm Board decided that suitable marketing facilities were lacking and if a representative coöperative association could be formed, the Farm Board would loan funds to this association at a low rate to be repaid over a period of twenty years. The association in turn might loan its funds to members until the time of the delivery of farm products. The farmer could thus secure funds to pay whatever debts he had contracted in growing his crop, and he could hold the crop for a favorable price or join with his associates in doing something to the crop that would bring it nearer to the point of consumption and thus eliminate middlemen and their profits. Vegetables might be canned, wheat might be stored or made into flour, tobacco might be dried, or cotton might be ginned, as the group in question might decide.

But the arrangements made by the Farm Board proved unsatisfactory. Beginning with the last part of 1929, a new type of farm aid has evolved.

REMEDIES FOR THE POOR COÖRDINATION BETWEEN AGRICULTURE AND INDUSTRY

Problem of Prices. In the first section of this chapter it was pointed out that the agricultural problem seems to be a problem of prices. No matter how good credit facilities are and no matter how capable the farmer is, he fails to check the startling decline in farm prices which has reduced the purchasing power of his dollar by 50 per cent since 1929. Recent remedies for the agricultural situation seek to coördinate the reward to agriculture with the reward to industry by some form of price control.

Activities of the Federal Farm Board. The Agricultural Marketing Act of 1929, as we have seen, set up a Farm Board. The primary purpose of the act was to aid marketing, but the law provided that in emergencies this board might establish "stabilization corporations" to "buy, store, process, and sell" commodities when a surplus tended to deflate prices. By February, 1930, farm prices had fallen

so rapidly that the board set up a Grain Stabilization Corporation to buy wheat from coöperatives at a fixed price, higher than the market price, and to support the market by purchasing cash wheat and futures. The policy was extended to cotton. By the end of May, 1931, after a year of heavy intermittent buying had failed to stop the price decline, the Farm Board ceased its purchasing activity. Shortly thereafter the board said that it would have to sell the produce that it had accumulated. Despite a storm of farm protests that to throw the supply upon the market would ruin prices entirely, the Farm Board announced a policy of selling 5,000,000 bushels of wheat per month. Prices were so low, however, that the execution of this policy, in so far as it could be carried out, resulted in losses and further injury to the market.

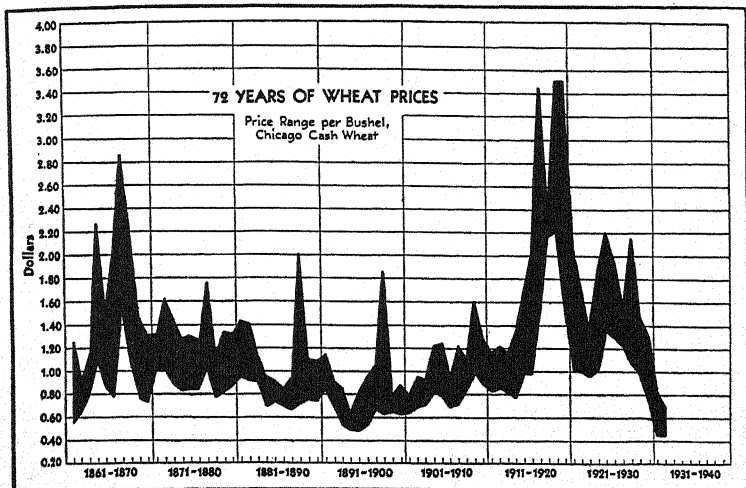
The Farm Board invested from \$350,000,000 to \$500,000,000 in cotton and wheat, but it did not succeed in stabilizing prices. If it had sold its holdings in July, 1931, it would have lost \$150,000,000 and prices would have fallen still more. Its activity seemed to encourage more production, for the wheat crop in 1931 was 5,000,000 bushels more than in 1930. On the whole the plan did not meet with success.

Proposed Remedies: The Debenture Plan. Several major proposals have been made recently for the relief of agriculture. Under the debenture plan every exporter of a farm product that is to be assisted would receive a bounty from the federal Government equal to one-half the tariff on the product. This would enable the exporter to bid more for the product and to sell it at a price abroad which would meet world competition and yet give him a profit. It is claimed that purchasers of the product for use in this country would have to bid as high as the exporter could afford to and that all prices of the product would therefore be raised, while the cost to the federal Government would be only the bounty to the exporter.

To illustrate the debenture plan, suppose that in a given year a farmer in this country produces 100 bushels of wheat. The federal Government offers a bounty to exporters of 25 cents a bushel. This enables exporters to pay the farmer 25 cents more a bushel, and forces all other purchasers to do likewise. If exporters buy 20 bushels, the cost to the Government is only \$5, which goes to the farmer through the medium of the exporter, and the farmer also receives an additional \$20 because domestic purchasers are forced to pay more

for the remaining 80 bushels. In this way, it is claimed, the Government would grant a subsidy to agriculture and at the same time make American purchasers pay more for farm products. If too much produce for home consumption was grown, a method of facilitating export would be at hand. By raising or lowering the bounty, it is declared, the Government could exercise a high degree of price control.

Equalization-Fee Plan. Under the proposed equalization-fee plan, no bounty is paid from the federal Treasury. Instead a government Export Corporation would be set up to buy surplus products at the



(From *The Business Week*, November 9, 1932.)

world market price plus the tariff rate. The Government would furnish the money and the products purchased would be withheld from the domestic market. This procedure, in conjunction with the price offered by the Export Corporation, would force domestic buyers for home use, it is claimed, to raise their own payments to the same level. The corporation would sell its products abroad at the world price, and its loss would be made up by the farmers benefited.

To illustrate the equalization-fee plan, suppose Farmer Brown raises 100 bushels of wheat. The domestic price is 40 cents, the world price is 35 cents, and the tariff is 10 cents. Ordinarily Brown might sell 20 bushels abroad and 80 bushels at home, getting \$39

in all. Instead, the Export Corporation steps in and buys 20 bushels at 45 cents (the world price plus the tariff), which it sells abroad at 35 cents. The loss to the corporation is \$2, which Brown must pay. But since the action of the corporation has forced domestic buyers to pay 45 cents also, Brown gets \$45 for his 100 bushels, and after paying \$2 to the corporation, has \$43 left instead of \$39.

When we analyze this plan, what is its effect? The Government comes out even; the farmer gains \$4; and the domestic consumer has to pay \$4 more for his 80 bushels of wheat. In short, industrial processors and industrial wage-earners are forced to pay higher prices to the farmer, and thus an attempt is made to restore the value of the farm dollar and to coördinate agricultural and industrial rewards.

The debenture plan is quite similar, the main difference being that the Government bears part of the expense along with the consumer. But the Government has to raise the money by taxing the consumer and the farmer, so that the principle is not very different from the equalization plan.

Agricultural Adjustment Act of 1933. Under the two plans discussed above, there is no guarantee that farmers will not produce too much wheat, or cotton, or whatever the crop may be. Some experts say that such a result would occur when prices are fixed. The voluntary allotment plan, which has been incorporated in the Agricultural Adjustment Act of May, 1933, seeks to control production. The Secretary of Agriculture is authorized to make contracts with producers of basic agricultural commodities,⁶ whereby these producers agree to reduce their acreage, or production, or both.

No farmer is compelled to enter such an agreement against his wishes. When farmers make such agreements, the Secretary is authorized to make payments to them, generally in proportion to their reduction of acreage or production. The money for the payments will be raised by a tax upon the processors (manufacturers) of the commodity involved. The purpose of the tax and the payments is to raise farm purchasing power to the prewar level (1909-14). Thus the tax will be equal to the difference between the current farm price of the commodity and the prewar price, which is called the *fair-exchange* price.

The aims of the voluntary allotment plan are obvious. The tax on

⁶ The basic agricultural commodities are wheat, cotton, field corn, hogs, rice, tobacco, and milk and its products.

the processors will be largely shifted to consumers. The plan is an attempt to make industry and consumers share with the farmer the fruits of national well-being. Advocates of the scheme maintain that by so doing other interests will not only aid the farmer, but will also protect themselves against the evils of an economic situation which cuts down the purchasing power of a large section of the population.

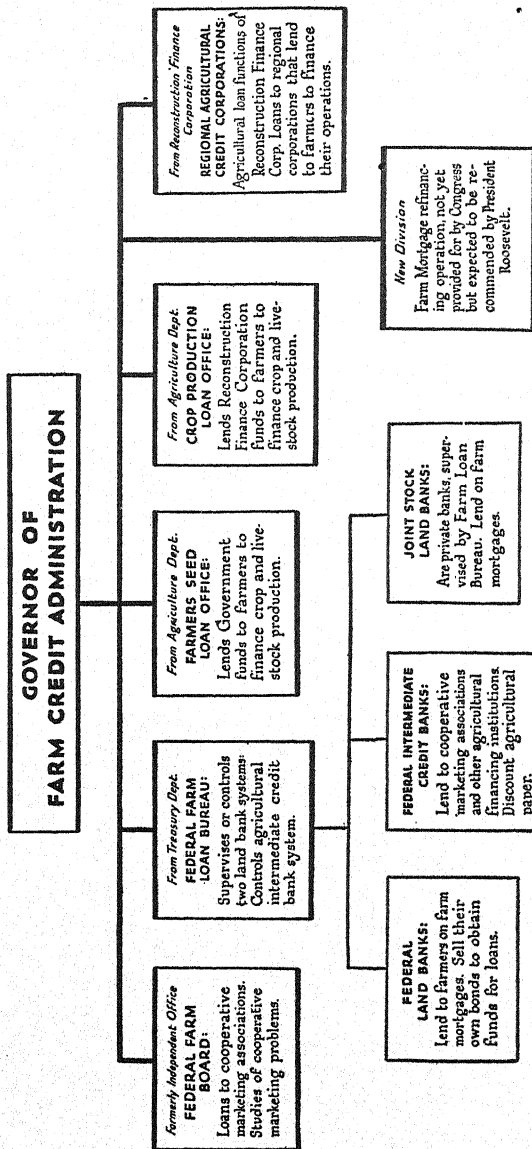
In addition to helping the farmer by regulating production and prices, the Agricultural Adjustment Act provides for government supervision of the marketing of all agricultural commodities. The Secretary of Agriculture is authorized to enter marketing agreements with processors, associations of producers, and others who handle agricultural commodities in interstate commerce. The agreements will contain the terms designed to promote healthy conditions in agriculture, and the Secretary has the power, by means of a licensing system, to outlaw from interstate commerce those who engage in practices contrary to the purposes of the act. At the time of writing (1933) it is not apparent how the plan will work out.

Debt Revision for Agriculture. There has long been a need for revision of the farmers' debts. With the fall in prices and the corresponding change in the purchasing power of the dollar, a farmer who borrowed \$10,000 seven years ago owes a sum of money that is still called \$10,000, but which has much greater value than what he borrowed and is consequently more difficult to raise. By the middle of 1933 the need for a refinancing of farm mortgages at a lower rate of interest became so great that the Emergency Farm Mortgage Act was passed.

This act authorizes the federal land banks to issue \$2,000,000,000 worth of bonds, bearing interest of not more than 4 per cent. The proceeds of their sale are to be used to make loans to farmers and to purchase farm mortgages.⁷ The mortgages acquired by the banks are to be refinanced at a rate of interest not to exceed 4.5 per cent for the first five years. In addition, payments of installments on the principal may be postponed for five years. Under the same act the Farm Loan Commissioner may lend \$100,000,000 to the joint-stock land banks, whenever the latter organizations agree to reduce to 5 per cent the rate of interest on all farm mortgages which they hold, and agree further not to foreclose on farms for a period of two years. Finally, \$200,000,000 are provided for direct loans to farmers for refinancing

⁷ The bonds themselves may also be exchanged for farm mortgages.

How Agricultural Loan Agencies Are to Be Coordinated



(From The U. S. Daily, March 27, 1933.)

mortgages, for working capital, and for the repurchase and redemption of farm property.

Tax Revision a Necessity. Farm taxation needs to be reduced. By 1931 the farmer was paying 31 cents in taxes out of every dollar of his net income. His tax expenditures exceeded the outlay for farm improvements or his investment in machinery and tools. With farm income falling rapidly, farm taxes, which in 1919 (the year of greatest agricultural prosperity) were 130 per cent of the prewar level, rose to 232 per cent in 1922 and to 260 per cent in 1930. They have hardly been reduced since. The farmer is paying a grossly disproportionate share of the expenses of government, based upon an antiquated method of property evaluation which has no place in our predominantly industrial system.⁸

Such proposals for tax and debt revision are aspects of the larger problem of balancing agriculture and industry. The farmer must be relieved of the excessive contribution he now makes toward the cost of government. Because of his position as a debtor, he must not be made to bear the heavier part of the trials of price deflation and depression.

Planning in Agriculture. No one can foretell the success or failure of the new experiments in agriculture. But there is progress in the realization that planning on a national scale must be substituted for random uncoordinated activity. With government supervision of production, prices, and marketing, the time may be near at hand when a healthy agriculture will afford a sound basis for national prosperity.

RELIEF FOR THE SMALL HOME-OWNER

Home Owner's Loan Act of 1933. The act for relieving farm indebtedness is paralleled by the Home Owner's Loan Act of 1933. Thousands of people with moderate incomes, including many farmers, built homes during the era of prosperity, paying part of the cost immediately and giving long-term mortgages for the balance. With the coming of the depression, such people have suffered the special burdens of the debtor class. Their incomes have dwindled and the value of the dollar has risen, while they have been forced to make fixed payments of principal and interest based upon the years 1922-29. The struggle to maintain homes has drained resources from every productive enterprise, and has caused a nervous strain which has reduced

⁸ See *Recent Social Trends*, Vol. I, pp. 500 *et seq.*

moral and physical stamina at a time when such qualities have been needed most. In addition, defaults and foreclosures have saddled banks and insurance and mortgage companies with frozen assets that have burdened the whole economic system.

Under the Home Owner's Loan Act, a corporation has been established to issue \$2,000,000,000 worth of bonds bearing interest up to 4 per cent and maturing within eighteen years. The bonds may be offered to mortgagees in exchange for home mortgages. In addition, the corporation may make cash advances to home-owners to pay taxes and assessments and to provide for maintenance and repair. The cash advances to one home-owner, plus the face value of the bonds exchanged for the mortgage on his home, must not exceed 80 per cent of the present value of the home. When such a transaction has occurred, the corporation will take a new first mortgage on the home, reducing the principal to the amount that has been advanced in bonds and cash, and charging interest of not more than 5 per cent. The period of the new mortgage will be fifteen years, with a compulsory three-year suspension of payment of principal installments and very liberal terms as to payment of interest.

This plan will help the home-owner in three ways. Since the new mortgage will be based upon the current value of the property rather than on the predepression value, principal installments will be reduced. Secondly, interest rates, which may well be 7 per cent under ordinary first mortgages, will be cut down to not more than 5 per cent. Thirdly, invaluable time extensions will be granted. Thus the creditor class will share with the debtor class the burdens of the depression. At the same time, it is maintained that creditors will benefit by receiving sound bonds in exchange for mortgages that they cannot collect, and from which they would gain little by foreclosure proceedings.

When the mortgagees will not accept the bonds, the corporation is authorized to make cash advances up to 40 per cent of the present value of the property for the purpose of acquiring mortgages. On unencumbered homes cash advances up to 50 per cent may be made for taxation and repairs. The act applies only to homes valued at not more than \$20,000, which are occupied by not more than four families, and which are used as homes by their owners.

The act provides for only voluntary exchanges. In so far as the exchanges confer mutual benefits upon home-owners and mortgagees,

they will be assented to by everyone involved. But there will be many cases where the exchanges would bring about a redistribution of wealth and would strengthen a weaker class at the expense of a stronger class. In such cases, it remains to be seen whether such redistribution of wealth can be brought about by affording opportunities for voluntary individual action, or whether stern government measures will be adopted and approved by the people.

SUMMARY

Apart from the problem of coördinating industrial activity and the task of adjusting production and consumption, many people think there is need to coördinate the rewards to agriculture with those to industry. During the prosperity era agricultural well-being went steadily downward, due chiefly to a failure of farm prices to advance along with other prices. Since 1929 the farmer has suffered seriously from the depression and an intensification of the maladjustment between agriculture and industry.

The earlier remedies for the farmer's difficulties lay in the extension of credit facilities. The debenture and equalization-fee proposals aimed to advance farm prices to a level with other prices, but neglected production control. None of these remedies penetrated to the heart of the problem.

The acts of 1933 for the relief of the farmer and the small homeowner include remedies for other problems of groups relatively weak in economic strength and may be regarded as a step in the direction of economic planning. Time will reveal the strength or weakness of the new measures.

QUESTIONS AND PROBLEMS

1. What do we mean by *coördinating* agriculture and industry? Is the problem of coördinating agriculture and industry similar to that of coördinating production and consumption? Explain.
2. Describe the decline in agriculture between 1920 and 1929. What do we mean when we say that the agricultural question is a problem of prices? Has agriculture suffered more than industry since 1929? Why is agricultural welfare a national problem?
3. Tell why the farmer is particularly dependent upon credit. Why are local banks unable to supply the farmer with sufficient credit? Describe

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- the federal aid that has been given to farm credit. Suggest a reason why the federal credit acts have not rescued agriculture.
4. Describe the main features of the debenture plan and the equalization-fee plan for stabilizing farm prices. What notable departure do these plans make from previous methods of handling economic problems in this country? Do you think these departures are necessary? Give reasons.
 5. Describe the main features of the allotment plan of the Agricultural Adjustment Act of 1933. Is the allotment plan in harmony with the main idea in Part Three of this book? Explain. If in disagreement, can you justify the inconsistency?
 6. What are the main provisions of the Emergency Farm Mortgage Act of 1933 for the relief of farm indebtedness? Discuss its merits and defects.
 7. How are present farm taxes unjust? Suggest a remedy for farm taxes in your state.
 8. *Report for a volunteer:* Find out all you can about rural indebtedness in your state.
 9. In what respects are the problems of the small home-owner similar to those of the farmer?
 10. What are the provisions of the Home Owner's Loan Act of 1933, and what are, in your opinion, its chances of success?

Chapter 18

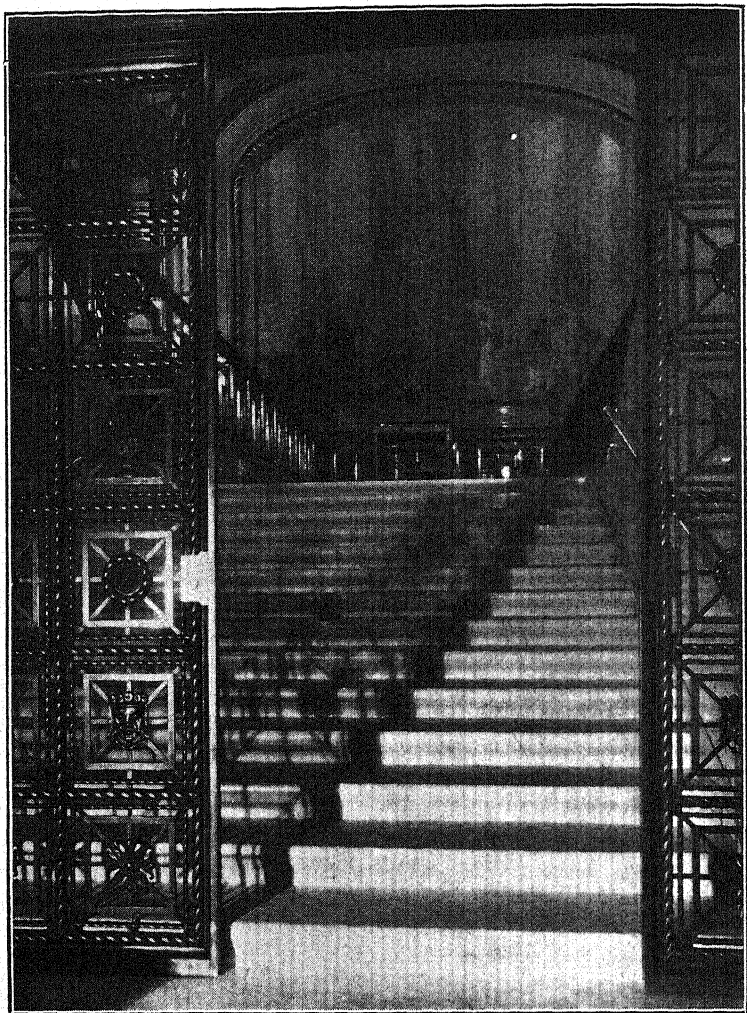
FINANCIAL AGENCIES FOR COÖRDINATING ECONOMIC ACTIVITY

BANKS AS INSTRUMENTALITIES FOR COÖRDINATING CREDITS AND THE NEEDS OF BUSINESS MEN

Mediums of Exchange. Although under normal circumstances gold is the basis for all of our money, most of the money in circulation is not gold. Paper money (gold and silver certificates) is issued in large quantities, backed by gold and silver held in the Treasury vaults. In addition, the familiar coins of minor denomination are in circulation. Bank checks and other negotiable instruments, such as drafts and bills of exchange, are also widely used and probably form the most important mediums of exchange.

Credit and Banking. To engage in business a person must have control over some medium of exchange, that is, he must possess purchasing power. Most business men work on a larger scale than their own resources would allow. To do this they use the money of other people who have surpluses for investment. Banks are the primary institutions in our economic society for collecting funds and lending them to people who need them.

Within limits fixed by the requirements of legal reserves of gold and by the judgment of their officers, banks may create purchasing power and confer it upon such individuals as may care to incur the obligation of its repayment. For this service a bank charges interest, from which its profits are derived. Usually borrowers from a bank are persons engaged in money-making enterprises who wish funds for



Banking is the royal profession of modern industrialism. Its majesty is evidenced by this lavish entrance to a leading hall of finance. (A Bourke-White Photo.)

MONEY AND CREDIT

Monday, Oct. 16, 1933.

A hardening in the Street market for call loans, which went at $\frac{1}{4}$, as against $\frac{1}{2}$ @ $\frac{1}{4}$ last week, was the only exception to an otherwise quiet session in money. Business was small and quotations steady for all classes of accommodation.

Call Loans.

New York Stock Exchange.

Re- newals.	High.	Low.	Last.	Friday. Last.	Year Ago.
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	1
New York Curb Exchange.					
1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1 $\frac{1}{4}$

Time Loans.

		Satur- day.	Year Ago.
60 days	1 $\frac{1}{4}$ @ $\frac{1}{4}$	1 $\frac{1}{4}$ @ $\frac{1}{4}$	3 $\frac{1}{4}$ @1
90 days	1 $\frac{1}{4}$ @ $\frac{1}{4}$	1 $\frac{1}{4}$ @ $\frac{1}{4}$	3 $\frac{1}{4}$ @1
Four months	1 $\frac{1}{4}$ @ $\frac{1}{4}$	1 $\frac{1}{4}$ @ $\frac{1}{4}$	3 $\frac{1}{4}$ @1
Five-six months	1 $\frac{1}{4}$ @ $\frac{1}{4}$	1 $\frac{1}{4}$ @ $\frac{1}{4}$	1 1 $\frac{1}{4}$ @1 $\frac{1}{4}$

Commercial Paper.

	Satur- day.	Year Ago.
Prime names, 3 to 4 months ..	1 $\frac{1}{4}$ 1 $\frac{1}{4}$ 1 $\frac{1}{4}$	1 $\frac{1}{4}$
Prime names, 4 to 6 months ..	1 $\frac{1}{4}$ 1 $\frac{1}{4}$ 1 $\frac{1}{4}$	2
Less known names on same maturities	1 $\frac{1}{4}$ 1 $\frac{1}{4}$ 2 $\frac{1}{4}$	

Rediscount Rate, N.Y. Reserve Bank

Rate on all classes of rediscountable paper 2 $\frac{1}{2}$ per cent. Rate effective May 26, when it was reduced from 3, in effect since April 7. Rate a year ago, 2 $\frac{1}{2}$ per cent.

Bankers' Acceptances.

Prime bankers' acceptances, eligible for purchase or rediscount by Federal Reserve Banks. Rates quoted are for discount at purchase:

	Bid.	Asked.
30 days	$\frac{1}{4}$	$\frac{1}{4}$
60 days	$\frac{1}{4}$	$\frac{1}{4}$
90 days	$\frac{1}{4}$	$\frac{1}{4}$
Four months	$\frac{1}{4}$	$\frac{1}{4}$
Five months	$\frac{1}{4}$	$\frac{1}{4}$
Six months	$\frac{1}{4}$	$\frac{1}{4}$

(From *The New York Times*,
October 16, 1933.)

1 per cent. Short bills up 1-16 on bid price at 11-16, per cent; three months' bills unchanged at three-fourths of 1 per cent.

No purchase of gold by
of England was

carrying on undertakings from which they expect to secure a profit that will enable them to pay the interest demanded by the bank and still have a gain for themselves. When a borrower approaches a banker for credit, the banker requires from him a signed paper called a *promissory note*, which sets forth the terms of the obligation. Usually the note will be due in thirty, sixty, or ninety days, and must then be paid unless the borrower can renew the loan. The banker may protect himself from loss by requiring *collateral*, or a pledge of property equivalent in value to at least the amount of the note, which he may dispose of if the borrower fails to pay the note when due. The transaction is completed by an entry in the accounts of the bank, recognizing the borrower's right to with-

draw such sums as he may have arranged for. The borrower can then write checks to pay any obligations he may incur in buying goods.

How the Banker Gets Currency to Lend. But where does the banker secure money to lend? The banker, if his funds are low, takes the note signed by the borrower to the Federal Reserve Bank in his district and has it *rediscounted*, that is, he guarantees its payment at maturity and receives credit at the Federal Reserve Bank for it, less the rediscount rate of interest then prevailing. This rate will be less than the rate the banker receives from borrowers, so that he profits by the margin. This transaction gives the banker the right to draw federal currency from the Federal Reserve Bank to the amount of his credit there. It is this money that the banker pays out over his own counters as it is demanded.

Obviously it is desirable to have a currency system that will respond quickly to the ebbs and swells of business. We have seen that price fluctuations play havoc with business forecasting, and that prices are low or high depending in part upon the ratio of money to goods and transactions. A banking system can do much to stabilize prices by providing a flexible currency.

How the Federal Reserve System Promotes a Flexible Currency. Before the Federal Reserve Act of 1913, currency was based upon the national debt. As a rule banks could secure paper currency only by purchasing government bonds and depositing them with the Government. This left the currency absolutely unresponsive to changes in the volume of business transactions. Under the Federal Reserve system the amount of currency released depends upon the amount of the notes rediscounted at the Federal Reserve banks. The notes represent money borrowed chiefly to carry on the buying and selling transactions of the community, and are therefore a fairly accurate index of the volume of business transactions.

Need for a Fluid Currency. The total currency should also be controlled so as to be at the disposal of a section of the country threatened with panic. The Federal Reserve system marshals bank reserves so that one member bank can secure money on short notice from an immense pooled fund whenever a local crisis occurs. Once the crisis is over, the money drains naturally back into the pool.

Savings Banks. The collection of capital funds is carried on chiefly by savings banks and investment houses. Since savings banks usually collect small sums and limit the time within which the return of the funds may be demanded by depositors, they can invest their funds in less liquid and more profitable securities than can com-

mercial banks, which have to meet the needs of their depositors on demand.

Investment Banks. Investment banks handle securities—chiefly the bonds and stocks of business enterprises—for firms needing capital, bringing them into touch with the investing public. Investment banks frequently work on a pure agency basis, acting as *underwriters*, which means that the investment house guarantees the sale of the securities at a stipulated price. This function of collecting funds and placing them with investors is of great significance in giving direction to industrial activity, for business enterprises ordinarily depend on the sale of securities to supply the capital for the building of plants and the buying of equipment. To buy goods, pay wages, and to meet other operating expenses they usually depend on short-time loans from banks.

Commercial Banks. As a rule commercial banks are expected to furnish only operating capital on short-time notes. Such capital is used only for buying materials and paying expenses from which the returns are quick. The notes must be paid as soon as the product has been sold. Even in short-term operations a refusal of credit is extremely serious and usually results in the contraction or cessation of business activity. In consequence the commercial banker as well as the investment banker has something of a veto power over the forms of business activity.

BANKS AS INSTRUMENTALITIES FOR COÖRDINATING DIVERSE BUSINESS ACTIVITIES

Power of Banks to Control Business Activity. In the preceding section the banker's duty to coördinate currency supply with business needs was pointed out. That problem has been solved fairly well by the Federal Reserve system. The great task remaining for bankers is that they shall grant credits so as to promote the right proportion of each sort of economic activity. Bankers are not entirely free in this matter; they cannot grant credit where it is not asked. And as business men themselves they cannot refuse to enter every legally sound venture that may threaten to disturb economic coördination. But they exercise great influence in determining major trends of economic activity, and it is here that they might be of great service in coördinating economic activity.

Course of Credit from 1922 to 1929 as a Cause of Depression. The period from 1922 to 1929 witnessed a great expansion in bank credit, but the extension was uneven and in some respects novel. Commercial loans, which had formed a major part of commercial banking business, were no greater in the exceptionally active year 1929 than in the depression year 1921.

The more speculative and less liquid loans on securities and urban real estate rose nearly eight billion dollars, representing almost three-fourths of the total increase in loans and investments during the period. Diversion of credits into these markets had the twofold consequences of financing a prolonged and colossal speculation and of loading the banks with appreciable assets which are particularly difficult to liquidate under conditions of declining prices.¹

This quotation indicates how banks may promote and accentuate unhealthy tendencies. Although it is clear that much which has happened

has been the joint result of commercial, industrial, fiscal and investment policy, which banking policy might influence but not direct, the ramifications of financial policy are so pervasive as to make its consequences crucial in the total situation.²

Profit-Seeking in Business as an Obstacle to Sound Banking. The banker who makes commercial loans wants to be repaid, and the investment banker hopes that the securities in which he deals will have a high earning power. For these reasons banks aid those enterprises which show promise of making the highest profits. Earlier in this book we have pointed out the frequent contradiction in business affairs between rendering socially desirable services and making profits. So long as this contradiction exists, banks are rather helpless. They have no choice but to foster enterprises which will make profits, and they can give only slight consideration to other businesses.

Evil Effects of Bankers' Profit-Seeking. The lure of profits has turned many banks away from their proper function of bringing funds to worth-while enterprise, and has diverted them into the field of speculation.

¹ *Recent Social Trends*, Vol. I, p. 255.

² *Ibid.*, p. 253.

Investment expansion has, in the form which it took during this decade [1919-29], likewise proved to be a serious weakness in banking policy and practice. The opportunities for apparently great appreciation in the value of bonds and the lure of high coupon bonds converted many banks into investment institutions. The prospects of high yields and large profits from the turnover of investments filled the portfolios of banks with many high coupon bonds of foreign governments and private corporations and with the second, third and fourth grade bonds of American companies. Moreover the speculative spirit prevailing in the country and the organization and development by the large city banks of departments for the sale of security issues made it certain that securities of even low quality would find a wide market. Securities, consequently, normally regarded as unfit for banking investment, were bought in large volume by banks of all sizes in all parts of the country.³

The chief evil in this situation is not the amount of speculative loss which resulted, although the weakening of banking strength through such losses contributed to a business decline. The great tragedy is rather the diversion of attention from problems of co-ordinating business enterprises in the public interest to the fascinating game of advertising, promoting, and trading in securities in order to turn quick profits.

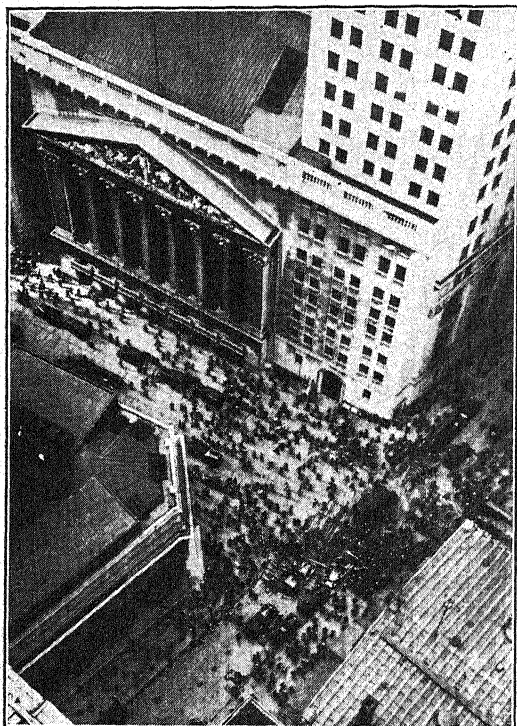
SECURITY EXCHANGES, SPECULATION, AND BANKING POLICY

Stock Exchanges. A security exchange—a *stock market*—is a place where professional dealers meet to buy and sell securities; its primary purpose is to sell securities to the public. Here the prices of securities are fixed. The exchanges are private associations of traders subject to certain public regulations. They decide—or their agents, usually an elected board of governors, decide—what securities shall be admitted to trading. Private investors cannot buy and sell on the stock market except through brokerage firms which possess memberships and which act as agents in the transaction. Accordingly an individual who wishes to buy or sell necessarily approaches the market, directly or indirectly, through one of the member firms.

Legitimate Function of an Exchange as a Coördinating Agency. Speculation occurs in stocks and bonds just as it does in wheat or corn, and serves in a more limited way the same purpose. Specula-

³ *Ibid.*, p. 256.

tion is sometimes defined as buying and selling in anticipation of changes in price. Profits are made when the anticipation turns out



The New York Stock Exchange. The economic welfare of the tens of thousands who pass this corner every day and of the whole nation depends partly upon the sagacity of the few hundred members who own seats upon the floor of the exchange. (International Newsreel Photo.)

to be correct; losses result from incorrect anticipation. The justification for speculation in produce markets is that professional traders, with an expert knowledge of conditions governing the supply of and the demand for a product buy or sell in anticipation of a change in price and thus prepare the public for what is about to happen. Professional traders, being well informed, will bring a shift of weight to the buying or selling side of the market.

Shortcomings of Expert Traders as Coördinators. The foregoing explanation provides, of course, a sort of ideal justification of the professional trader. It as-

sumes knowledge among the professional traders which they may or may not have; and it assumes a reaction to facts which may or may not take place.

Very complex forces govern prices, and attempts to forecast their movements, even those made by expert statisticians, have never been uniformly successful. Reason exists, therefore, for doubting

whether so great benefits come from professional speculation as is sometimes claimed. Moreover, it is well known that regular traders frequently act against rather than for the public interest. Their business is to make a profit from changes in prices; and they are not governed by a social duty to anticipate correctly the economic conditions of the future. Indeed certain traders will at times start rumors in order to gain thereby; again they sometimes pool, or combine, their resources and create apparent shortages where none exists. Such practices have led to suspicion of their customs and, at times of serious crisis, to suspension of trading.

Shortcomings of the Inexpert Public as Coördinators. The stock market has raised another serious problem. The public in increasing numbers has become interested in buying and selling stocks. The most ignorant individuals frequently "take a flyer," often on a tip of doubtful reliability. Some amateurs habitually use their savings in this way, following their own guesses or the "hunches" of others. Certain newspapers even publish daily advice to would-be speculators. The Street—Wall Street, where the New York Stock Exchange is—has become, for many people, simply a more respectable gambling device than was ever invented before.

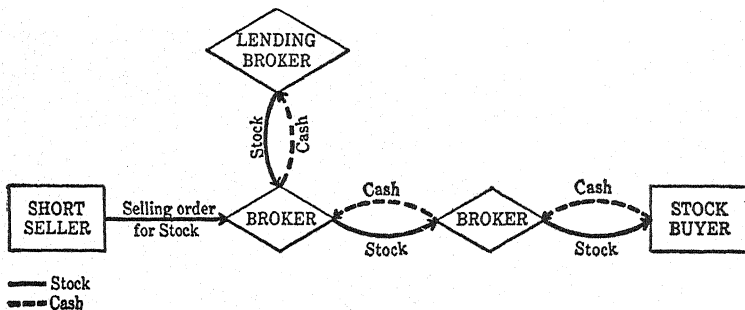
It is clear that gamblers on the market are exercising a banking function without the aid of banking experts. They are using their own judgment as to what business should receive funds for further expansion. Even if all stock issues were backed by honest enterprise, all would not be worthy of support from the standpoint of regularizing and coördinating business activity. Certainly the "dabbler" in the market has neither the knowledge nor the wide-range view necessary to exercise banking discernment.

Inexpert stock-buying is hurtful also to the individual investor in the narrower sense. He makes bad guesses and loses money. So long as this goes on in a small way, we may say, "The devil take the hindmost." But when, as in the collapse of 1929, thousands lose their meager life savings, and when subsequent investigations disclose malpractices by persons "on the inside" of the exchanges, there is a real need for some sort of regulation in the public interest.

Marginal Activity as an Incentive to Inexpert Market Activity. Frequently stocks are bought or sold on *margin*, which means that only a small percentage of the funds required for the purchase is advanced by the buyer or seller. In such cases the customer deposits

a few hundred or a few thousand dollars with a broker, thus opening an *account*. Thereafter the broker carries out his client's instructions for trading (often on the advice of the broker).

If stock is bought, for example, the broker uses it as collateral for a loan in the call-money market, paying the interest demanded and charging it on his books to the customer for whom he is acting as agent. By this arrangement the customer may not only *go long*, or buy on margin, when he believes an advance in the price is about to



The short seller orders his broker to sell stock he does not own, expecting a decline in price and an opportunity to buy back at a lower figure. The sale is made on the floor of the exchange to another broker representing the security buyer. The seller's broker then borrows stock from another lending broker, and delivers it to the buyer's broker. The lending broker happens to be carrying this stock for a customer. The lending broker makes a loan of the stock against the deposit of cash which the short seller's broker has received from the buyer's broker. (From H. P. Willis and J. T. Bogen, *Investment Banking*, Harpers, 1929.)

take place, but he may also *go short*, or sell without actually owning the stock. In short trading what he sells is merely a promise to deliver the stock, his hope being that what he "sells" will fall in price so that he may later buy for delivery at a lower level. Long and short trading permit the customer to act in anticipation of either a rise or a fall in the price. The broker in either case watches his accounts, and so long as any customer is "on the right side of the market" all goes well. Eventually the client may close out and take a profit, but if he is on the wrong side of the market his margin may be wiped out. Then, if he cannot or will not risk additional funds, the broker will close out the account to protect himself, since he is responsible to the banker for payment of the loan. Long margins are exhausted when the price falls by more than the customer's advance. Short margins are exhausted if,

instead of falling, the price should rise by more than the sum advanced by the customer.⁴

The opportunities for quick profits in buying on margin are tempting. The temptation is increased by the fact that the speculator needs to provide only a small percentage of the sum actually involved in the transaction. On \$1,000 he may gain the increase in price over a short period of time of perhaps \$10,000 worth of securities, the exact amount depending on the margin the broker requires. Of course equally quick losses may also result. Rumors are always in circulation about a stock that is "sure to gain" or "sure to lose" several points (dollars per share) almost immediately. On such slender assurance many speculators risk their funds. This is the true picture of what often occurs on the stock market; it may be contrasted with the ideal one in which sound information and sober judgment are brought to bear in central places so that prices shall be beneficially affected.

Prime Importance of Banks in Regulating Stock-Market Activity. Despite the great number of individuals buying and selling on the market, banks can exercise a great influence over their activities. So long as ownership enters into speculation the banks are seriously involved by their practice of advancing funds to brokers' customers. It is this fact, indeed, that makes speculation possible on a large scale. During speculative fever the sum of brokers' loans usually rises to incredible amounts; and in consequence the extension of credit to real productive enterprises such as those carried on by farmers or manufacturers has been seriously hampered.

Although corporations have found a new way to obtain funds by security issues rather than by bank loans, this does not mean that they have won independence from the banking system. For the banks have to supply purchasers with the funds used to take up these security issues. The provision of funds is still a banking function, although the procedure may have been changed. When securities are put on the market and made the basis for commercial loans, such loans are still made by banks, although their clients may be other bankers or speculators rather than producing corporations.

Federal Reserve System's Responsibility to Guide Market Activity. Whether the bankers want it or not, they find the problem of market

⁴ Customers' advances or margins formerly varied upward from 10 per cent of the price of the securities dealt in. In troubled times brokers keep margins high, and recently the requirement has been 30 per cent for accounts under \$5,000.

activity set squarely before them. One strange feature of the perplexity of the Federal Reserve Board is that its present attitude is a reversal of former policy. Before the speculative climax of 1929, responsible Federal Reserve officials declared repeatedly and plainly that they understood their duty to be not to say what kind of, but only how much, credit should be issued; and that it was no part of the board's functions to influence prices or to control business. At the same time the operations of the system were such that its policies affected business undertakings and prices whether or not its members believed they ought to do so. This is true because the board coördinates the financial system and the financial system is the greatest single agency in coördinating business. The Federal Reserve Board therefore lies across the very center of industrial activities. To say that its policies do not affect the conduct of industry is to deny that it does what it cannot possibly avoid doing.

The problem presented by the speculative activity in 1929 finally caused the board, in spite of its previous policy, to attempt to discourage speculation, even to the extent of issuing solemn warnings to its member banks of measures to be taken if brokers' loans were not reduced. Confusion still exists, however, concerning the proper functions of the Federal Reserve system and obviously calls for a clear definition of its aims.

Why It Is Difficult for Banks to Regulate Market Activity. One reason why it is hard for banks to guide market activity is the difficulty of distinguishing between *legitimate* and *illegitimate* trading on the stock market. Many economists have tried to distinguish between the two. By legitimate trading they mean speculation of an informed, professional sort; by illegitimate trading they mean gambling on hunches. But no way has ever been discovered to separate the two in practice. Accordingly, when a question arises concerning the amount of brokers' loans that represents the one as contrasted with the other, there is no clear line which can be drawn. For that reason, when faced with huge credits granted for speculation, such an agency as the Federal Reserve Board is forced to fall back on what is more or less a guess; and it can only warn banks and bankers when the total of the loans seems too high in proportion to the loans on other commercial paper.

It is undesirable, of course, that any large part of our credit facilities should be used for hoisting the market up or pulling it down just

so that easy profits may be made. At the same time it is desirable that financing business by security issues rather than by bank loans should be aided by a free and open exchange and by holding the rediscount privilege open to paper based on such securities.

The more important reason why banks fail to exercise a proper coördinating influence lies in the nature of the incentives to their own activity. As pointed out before, competition and profit-seeking drive even banks into the orgy of speculation. Banking as well as industry must be managed from the social rather than from the competitive profit-seeking viewpoint in order to serve its true function.

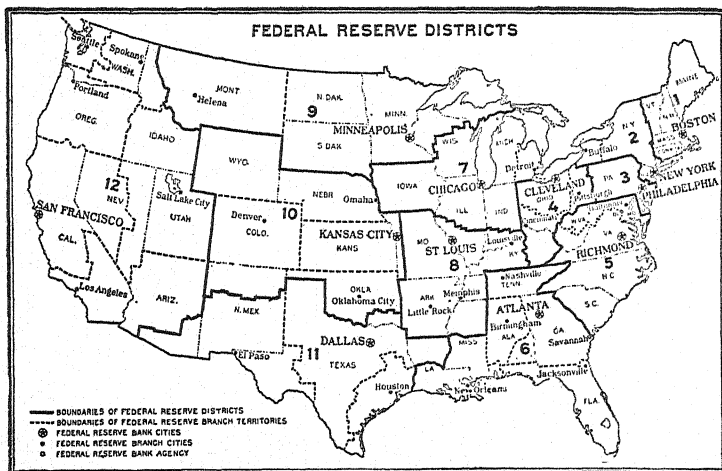
BANKING AS A BIG BUSINESS, AND THE PROBABLE REMEDY FOR PRESENT EVILS

Consolidation in Banking. In Chapter XIII the tendency toward large-scale banking was described. This tendency, as we saw, centralized power in the hands of a few huge banks. It was partly a fear of money power centered in Wall Street and partly a belief in the value of competitive business that led to the Federal Reserve system. Since this system was established, however, ways have been found to centralize the financial powers of the country in New York just as they had been centralized under the former arrangement; and competition after the old pattern has ceased to characterize finance. What the Federal Reserve system was designed to prevent has happened, and the system of business it was meant to sustain seems in a fair way to disappear. Big business and big banking have become so related that it is frequently said of well-known corporations that they are this or that bank's enterprises. At the same time some immense businesses have through necessity created departments within their own organizations which used to be thought of as belonging solely to banks.

Acceptance Corporations. One of the best-known and most rapidly growing devices is a corporation division with banking functions, commonly called the *acceptance corporation*, which operates in connection with installment selling. The acceptance corporation is a device for extending credit to customers in order to sell the product of the manufacturer or dealer. The creation of credit used to be a banking function. Formerly, if a firm allowed its customers credit the banker was called on, either directly or indirectly, to furnish the

funds. Now corporations frequently issue their own securities and are quite independent of bankers.

Many firms have also learned that they can free themselves from banker control even for commercial credit by selling limited-dividend preference shares or bonds and by building up large cash reserves. For example, a firm that needs \$50,000,000 for two months of the year may provide itself with the funds by issuing securities and may then lend the funds in the money market for the other ten months, or it



Map of the Federal Reserve System.

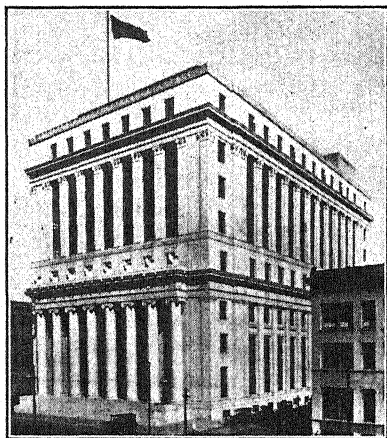
may regularly purchase the securities of other corporations, hold them until it needs funds, and then dispose of them. Operations such as these cut in upon the functioning of the traditional banking system and hamper the working out of the Federal Reserve plan.

Need of Regulating Big Banks. The present tendency is to recognize that centralized control makes coördination possible. As with big business, the problem is to regulate big banks in the public interest, not to break them up. Fortunately in the Federal Reserve system the mechanism is present for coördinating banking activity, and thus to make banking serve its true purpose as the primary coördinating agency in economic society. Let us look at the organization of the system.

How Federal Reserve System Is Organized. By the Federal Reserve Act of 1913 the country was divided into twelve Federal Reserve districts. In each district a Federal Reserve Bank was set up to be purely a "banker's bank," to rediscount, to issue currency, and in some measure to control broad financial policies. The main purpose in the division of the country is to have no district so big that it could dominate the others, to "have regard to the convenience and the customary course of business," and yet to make each district large enough to provide the minimum capital of \$4,000,000 required by the act.

All national banks are required to join the Federal Reserve system and state banks may join if they so desire. Member banks are required to subscribe to the capital stock of the Federal Reserve Bank in their district. The control of the Federal Reserve Bank is by the principle of "one bank, one vote." In addition, all the banks in a district are grouped in three classes, large, medium, and small. Each of these groups elects two directors, a Class A director and a Class B director. Each Class A director must be a banker. Each Class B director must be elected from a nonbanker group; usually he is a business man. To these six, three other directors are added by appointment of the Federal Reserve Board in Washington. One of the latter is appointed chairman of the district board. By this arrangement some representation of other than banking interests is secured.

The Federal Reserve Board at Washington consists of the Secretary of the Treasury and the Comptroller of the Currency, ex officio, and six other persons whom the President appoints to hold office for ten years. The board is also assisted by an Advisory Council of twelve members appointed by the boards of directors of the twelve Federal Reserve banks, which meets with the board at least four times a year.



The Federal Reserve Bank of San Francisco. (Courtesy F. R. Bank, San Francisco.)

Accomplishments and Possibilities of the Federal Reserve System. The system has provided a flexible, fluid currency and probably has averted some panics. It has done little to meet the broader problems of coördinating business, for it is a private banking system and meets the very obstacles which have been discussed. But the system is a splendid mechanism, with representatives from business, from banking, and from the Government, drawn from all over the nation and acquainted with the vast variety of national needs. It provides an opportunity for a socially planned banking system, but before that can be achieved there may be need for education of the directors in new ways and an intensification of government regulations of the banking business.

RECENT REMEDIAL BANKING LEGISLATION

Banking Crisis of 1933. The weaknesses in our banking system were well known before the depression of the thirties. In the twelve years following 1920 over 10,000 banks failed, with losses to depositors of over \$5,000,000,000. The years following 1929 imposed increasing strains upon financial organizations. The crisis came in March, 1933, when every bank in the United States was closed by Presidential proclamation. This does not mean that every bank was insolvent, but that so many banks were ruined and public confidence was so undermined that the extraordinary procedure of closing all the banks for a short period of time was necessary to prevent a total collapse. The vast majority of the important banks reopened within a few days, but hundreds of smaller institutions are still in the hands of conservators,⁵ and the consequent injuries to our domestic economy and to our international financial prestige have been great.

Emergency Banking Legislation: Abandonment of Gold Standard. The immediate result of the banking crisis was legislation which modified our currency system. Actually, the country had been off the gold standard since March, 1933, and this was made official on April 19, 1933, by the Emergency Banking Act authorizing the Secretary of the Treasury to call in all gold coin, gold certificates, and gold bullion, and to pay in exchange an equivalent amount of any other coin or currency of the United States. The President was empow-

⁵ A person appointed by the Government to take charge of an institution and preserve its resources.

ered to regulate or prohibit (1) any transactions in foreign exchange, (2) transfers of credit by banking institutions, and (3) the export and hoarding of gold or silver coin, bullion, or currency.

Subsequent legislation, incorporated in the Farm Act, empowered the President to reduce the weight of the gold dollar by not more than 50 per cent, to fix the weight of the silver dollar, and to provide for the unlimited coinage of money at whatever new ratio may be established between gold and silver, with gold as the standard unit of value. The same law permitted the President to issue \$3,000,000,000 worth of new currency. Still another measure repealed the gold clauses contained in public and private contracts, and thus nullified all obligations to pay debts in gold.

These laws apparently relieved the tension created by the temporary lack of confidence in paper money and by the hoarding of gold. None of these measures caused any considerable change in our banking organization, and when the immediate crisis passed, Congress enacted more significant laws to improve our financial institutions.

Banking Act of 1933: Safety for Depositors. The chief purpose of the Banking Act of 1933 is to provide safety for depositors. Four major steps are taken: (1) Commercial banking is separated from investment banking; (2) the speculative activities of commercial banks are curbed; (3) a system of insurance for deposits is provided; (4) the Federal Reserve system is expanded.)

1. Commercial banks serving the short-term needs of ordinary business people and holding the accounts of ordinary depositors have been weakened by excessive investment banking. The new law provides that banks which are members of the Federal Reserve system (primarily commercial banks) are not to be connected in any manner with any organization dealing primarily in securities, and are not to deal extensively in investment securities on their own account. They are prohibited from acting as agents of nonbanking organizations or individuals in making loans to dealers in investment securities on the basis of such securities. Conversely, no organization dealing primarily in investment securities is allowed to take deposits subject to checks.

2. In order to curb speculation by commercial banks the Federal Reserve Board is authorized to deny the use of the credit facilities of the system to any member bank using its own credit for excessively speculative purposes. The board is to supervise all dealings between Federal Reserve banks and foreign banks and bankers.

3. A Federal Deposit Insurance Corporation is created. All member banks are required to subscribe to its stock an amount equal to .5 per cent of their deposit liabilities, and all national banks are required to become member banks. State banks and trust companies which are not member banks may participate in the insurance plan until July 1, 1936, without joining the system, but after that time they will have to become member banks in order to participate. Under the plan individual deposit accounts are guaranteed as follows: (a) in full up to \$10,000; (b) 75 per cent of the amount over \$10,000 and up to \$50,000; (c) 50 per cent of the amount over \$50,000.

4. Centralization of commercial banking under the control of the Federal Reserve system is promoted in three ways. First, the insurance provisions make membership a prerequisite to benefits after July 1, 1936. Second, the law provides that mutual savings banks may become members of the system on practically the same terms as state bank and trust companies. Third, national bank associations are permitted to establish branches throughout the state in which they are located on the same terms as state banks that are not members and which are regulated by state law.

(Securities Act of 1933. Parallel to affording protection to depositors has been the problem of guarding investors in securities. The Securities Act of 1933 provided for the registration with the Federal Trade Commission of security issues, and forbade the transportation in interstate commerce of any security which was unaccompanied (or preceded) by a prospectus. Every registration statement and every prospectus must contain the following information:

1. The security holdings of directors, officers, and those owning over 10 per cent of the issue
2. The general character of the business
3. The capitalization of the enterprise, the paid-up stock, the voting rights, and the preferences
4. An analysis of the debts to be created by the security
5. The estimated net proceeds of the venture
6. The price for which the securities are to be sold to the public
7. The earnings of the securities of the issues during the prior two years
8. A profit and loss statement of the issues
9. A balance sheet of the issues within ninety days of issue ⁶

⁶ These are the most important provisions only.

Like most of the other measures passed in 1933, the acts relating to banking and finance are experimental and their merit can be determined only by time.)

Shortcomings of Banking Reforms. From the point of view of social control of economic activities the mere extension of the Federal Reserve system to cover the entire field of commercial banking would not strike at the central evils in such banking today. The system itself is composed of private banks in the pursuit of gain. It has provided a flexible and fluid currency, but has never reconciled individual profit-seeking with public welfare. The trouble in the past has not been that the system had not enough power. The trouble has been that the Government did not exercise enough power over the system to make it serve public needs. The unification of commercial banks within a single system may possibly bring on greater social evils than we have yet witnessed if it is not accompanied by a much greater degree of government control than is provided by the Banking Act of 1933.

The deposit-insurance feature, taken alone, is not enough. Like unemployment insurance, it will work when hard times are confined to a few sections of the country and are intermittent; it will be woefully inadequate when they are country-wide and of long duration. In addition, deposit insurance does not attempt to touch the problem of utilizing banks as agencies for coördinating business activities by the extension and contraction of credit.

The separation of commercial and investment banking seems likely to turn out to be a step in the wrong direction. The difficulty in the past has been less that commercial bankers were doing investment banking than that those doing investment banking were doing it as they pleased. Under the Banking Act, investment banking is divorced from the Federal Reserve system and thus is removed further from any possibility of social control. But it is investment banking which guides the flow of capital savings into new fields, which engineers long-term credits, and which occupies a key position in directing the broader course of economic development, both domestic and international.

Nothing could evidence a more tragic failure to profit from hard experiences under the depression than an unreadiness to place the guidance of investment under an increasing measure of public control. If our recent undertakings in economic planning are to meet with

success, they must embrace the task of capital allocation. Similar criticisms can be leveled against the Securities Act. Of course it is important that full and honest information should be available in regard to stocks and bonds sold to the general public. But the prevention of fraud as we commonly understand it is a minor problem. The two important questions raised by the stock-market situation are: (1) Should thousands of small investors be encouraged to exercise bankers' functions without knowing anything about banking? (2) Should the stock-exchange function, with all its social implications, be left as ungoverned as it is at present?

SUMMARY

Banks are the chief agencies for coördinating the supply of funds for investment and the demands of businesses needing money. Since the establishment of the Federal Reserve system in 1913, banks have satisfied the need for a flexible and a fluid currency.

The most important unsolved problem of banking today is the coördinating of business activities along socially useful lines by advancing credit in the right directions. During the period from 1922 to 1929, the overencouragement by banks of highly speculative activity contributed to the depression that began in 1929. Banks err not so much because of lack of knowledge as because the profit motive drives them, as well as the business they foster, into nonuseful or antisocial activities.

Stock and security exchanges are additional devices of coördination for bringing idle capital to places where it can be used effectively. The failure of exchanges to function in the social interest reëmphazizes the central problem of our economic society: how to coördinate random profit-seeking and to substitute planning for guesswork. Upon banks, and especially upon the Federal Reserve system, rests the responsibility of guiding market activities. In this respect banks often fall short, because they are generally controlled by the profit motive instead of by social welfare.

The recent tendency toward large-scale banking presents new social problems. Unregulated bigness is fraught with danger. But regulated bigness takes advantage of its natural facilities for coördination. The Federal Reserve system affords an excellent mechanism for control, but awaits new motivations and a greater degree of social supervision.

The banking crisis of 1933 took the United States off the gold standard. It led to legislation which separates investment from commercial banking, curbs the speculative activities of commercial banks, provides for deposit insurance, expands the Federal Reserve system, and regulates information in regard to the sale of securities. While these measures are a beginning, they hardly touch the chief problem of public control over the coördinating function of banks, and they evince little interest in investment banking and the allocation of capital.

QUESTIONS AND PROBLEMS

1. What is the difference between *money* and a *medium of exchange*?
2. Find out why gold and silver have displaced all other commodities as materials for our basal money.
3. Why do you suppose governments take charge of the making of money?
4. Why is credit essential to modern economic activity? How does a modern bank extend credit?
5. What is the difference between a flexible currency and a fluid currency? Tell which you think is the more important.
6. How does the Federal Reserve system promote a flexible and a fluid currency?
7. Describe the functions of savings banks; of investment banks; of commercial banks. Consult the Readings at the end of the chapter.
8. What is the most important coördinating function of banks today?
9. In what ways might the profit motive interfere with the coördinating function of banks?
10. What is the legitimate function of a stock exchange? How is it sometimes abused?
11. Describe marginal buying and selling. Can you see any advantages in permitting this practice? Explain evils that come from it.
12. Find out the meaning of the following terms and give examples of each: *take a flyer*; *sell short*; *the bears*; *the bulls*; *buy long*; *buy on margin*; *brokers' loans*; *call money*; *pool operators*; *commercial paper*.
13. Do banks sometimes "play the market"? How? Can you think of reasons why a savings bank should act differently in this respect from an investment bank? from a commercial bank?
14. Describe the accomplishments of the Federal Reserve system as a co-ordinator of banking activity. What are its possibilities for coördinating business?
15. Tell about the measures which took the United States off the gold standard.

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16. How does the Banking Act of 1933 separate investment from commercial banking? How does it restrain speculation by commercial banks?
17. Describe the provisions for deposit insurance. What do you think this provision might accomplish during a great depression?
18. How do the new banking laws provide for the extension of the Federal Reserve system?
19. In what sense is the system a "private system"?
20. What are the shortcomings of the new banking laws? How might they be remedied?
21. What is the chief function of investment banking?
22. What are the provisions of the Securities Act of 1933?
23. Does the Securities Act fall far short of a comprehensive treatment of the problems created by stock markets and exchanges? If so, in what respects?

READINGS IN THE CLASS LIBRARY

1. "Nature and Characteristics of Money," Patterson and Scholz, *Economic Problems of Modern Life*, pp. 225-46.
2. "Early State Banking," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 507-15.
- *3. "Money as a Measuring and Organizing Device," Marshall and Wiese, *Modern Business*, pp. 303-12.
4. "Outstanding Financial Institutions of Today," *ibid.*, pp. 312-26.
5. "How Business Enterprises Secure Funds," *ibid.*, pp. 326-36.
6. "The United States Steel Corporation," *ibid.*, pp. 381-419.
7. "Currency," Wells, *The Work, Wealth and Happiness of Mankind*, Vol. I, pp. 379-412.
8. "The Bank," *ibid.*, pp. 412-30.
9. "The Rothschilds," *ibid.*, pp. 463-71.
- *10. "Money," Clay, *Economics*, pp. 153-68.
11. "Banking and Credit," *ibid.*, pp. 169-94.
12. "Value," *ibid.*, pp. 242-61.
13. "Sacrificing the Producer for the Product," *ibid.*, pp. 411-15.
14. "Colonial Currency," Richard Hildreth, Forman, *Sidelights on Our Social and Economic History*, pp. 145-47.
15. "Two Views of the Paper Money of the Revolution," *ibid.*, pp. 147-50.
16. "Money in Colonial Times," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 96-100, 104-05.
17. "Trusts," *ibid.*, pp. 768-76.
18. "Early Coinage in the United States," *ibid.*, pp. 520-22.

Part Five

RAISING THE LEVELS OF LIVING BY REDISTRIBUTING INCOME

Looking Backward—and Forward

ONE OF the great signs of progress in modern times has been an increasing social concern in the economic welfare of the people as a whole. Coupled with this has come the desire to raise the levels of living of every section of our population.

Since the prerequisite to effective action is adequate information, we examined the present levels of living—poverty, comfort, and

riches—and discussed in considerable detail the distribution of our population over these levels. We found that until 1929 the present century witnessed a forward movement which reduced those on the poverty level from one-half to one-third of the total population. After 1929 a decline set in which increased the number of the poverty-stricken until they again represented about half of the nation.

Our economic advance has been due chiefly to improvements in the production of wealth. The raising of levels of living between 1922 and 1929 was made possible by corresponding improvement in the technique of production. An examination of the means of increasing production in mining, in industry, and in agriculture shows that the possibilities of further advance seem illimitable. Why, then, did a decline follow 1929? Why do levels of living fall when machines and men are just as able or even more able than they were before? The main answers to these questions are as follows:

1. The large-scale enterprise of today raises problems of business organization as well as of productive techniques. The advantages of big business and the corporate form of organization have brought social abuses that must be corrected by reconciling the interests of individual profit-seekers with the interests of society at large. In addition, business must be planned within itself so as to secure the maximum benefits from advances in technical skills.

2. Industrial activities must be coördinated. This is partly a question of adaptation to the price system. In a larger sense, however, coördination can be achieved only by regulation of competitive profit-seeking. This requires an extension of social control by an expansion of the public-utility concept or in diverse other ways.

3. The downward swing of the business cycle must be checked. This again is largely a question of coördinating producing power and consuming power by allowing workers to share more adequately in our national income.

4. The problem of coördinating the rewards of various economic groups calls for readjustments, particularly in the relationship between agriculture and industry. Here social control and social planning have reached the stage of action.

5. The financial system, as the central agency for coördinating all economic activity by control over credit, must function more effectively than it has in the past. A banking policy planned in the

national interest must gradually replace individualistic banking "at cross purposes for individual gain."

The problem of improving levels of living, then, is twofold:

- (1) The techniques of productive skills must be constantly improved;
- (2) the operation of economic activity must be planned on a large scale in order to secure "the greatest good of the greatest number."

Our distributive system suffers from several failings. Gross inequalities in individual and group incomes hamper the smooth operation of economic affairs. How can we effect a wiser distribution of income? Here again we must know the facts. Accordingly Part Five explains why various groups and individuals receive large or small incomes. It also points out the factors that must be expanded or contracted according to the kinds of changes we wish to bring about in our levels of living.

Chapter 19

THE PROBLEM OF DISTRIBUTING INCOME WISELY

THE NATURE OF INCOME

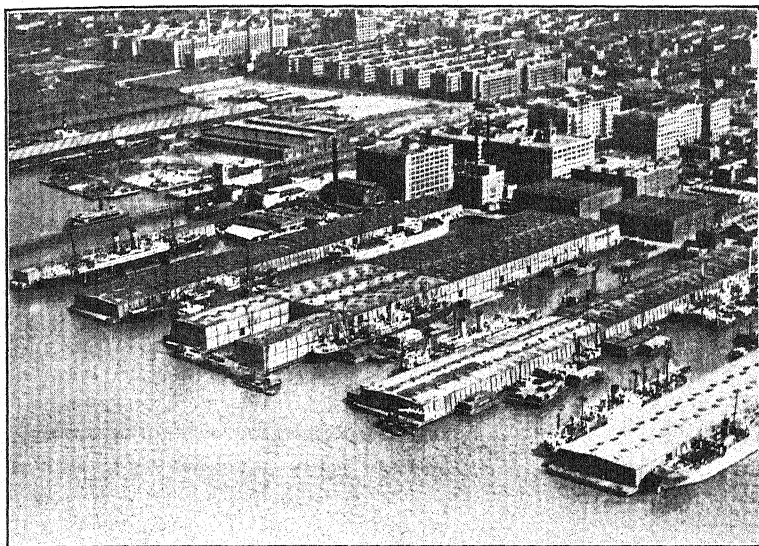
What Constitutes Income? The gross income of an individual consists of all the economic goods which come to him, including both wealth, or material goods, and immaterial goods, or personal services. The material goods would obviously include such items as food, clothing, and shelter; factories, warehouses, office buildings; steamships and railway trains; flowers, furs, and perfumes; wool, cotton, and wheat. Some of these material goods are in final form, ready to be used up, to be worn, or eaten, or enjoyed in other ways; some are in a final form to assist in further production (factories, machines, and tools); and some are in an intermediate form on their way to becoming goods which may later be used in final consumption or in further production.

Money received is also income, for it enables us to command material goods or personal services. It also gives us power to secure intangible evidences of ownership, such as stocks and bonds. Personal services include such diverse things as a physician's care, a teacher's instruction, and an actor's rendition of a part in a play.

Fluidity of Income. Practically all income in modern society comes in the form of money. By this device income is made fluid or interchangeable, that is, it may be transformed at the will of the recipient into any of the forms of wealth named above. Income may be spent or it may be saved. If it is spent, it usually goes for something to be used up immediately or later—to be enjoyed; if it is saved, it is perhaps invested in securities or in insurance of some kind, or it may be intrusted to the care of a bank. If income is invested or if

it is deposited in a bank, it is used by the business concerns which borrow it for the factories or raw materials or machinery or labor that the concerns need for carrying on industrial operations.

Uses of Money. This marvelous fluidity is made possible by the simple device of using money as the common denominator of every



Bush Terminal, New York. Practically every form and article of wealth passes daily over the wharves of New York, America's richest city. (Photo Ewing Galloway, N. Y.)

commodity and every service generally available in the community. The fact that money is so serviceable a device often leads the uninformed to conclude that money in itself is a good. For do we not speak of Mr. Blank as having so many dollars and as "being well off"? It is true that we do so, but what we really mean is that Mr. Blank possesses so many dollars' worth of purchasing power which he may use to secure whatever goods he desires. In fact money in itself is of little or no use; and income expressed in money terms does not tell the enjoyment to be had from it. Only when money has been transformed into goods can we see what is the real income of the person or the group possessing

CHICAGO, Oct. 19.—The Waukegan North Chicago Chamber of Commerce sent an innocent, unsophisticated brand-new dollar bill out into the cold cruel world, attaching a circular for a record of all transactions in which it figures.

The bill returned today, after 14 days of travel, soiled, wrinkled, dejected-looking, and its virginal crispness gone. It had kept away from churches, banks and all places of amusement and reported 31 changes of ownership, having been spent:

Five times for salary.

Five times for tobacco.

Five times for cigarettes.

Three times for candy.

Twice for men's furnishings.

Once for collar buttons.

Three times for meals.

Once for auto accessories.

Once for bacon.

Once for washing powder.

Once for garters.

Twice for shaves.

Once for tooth paste.

After several such excursions, the dollar bill is quite ready for a bath administered by the Treasury Department. (*N. Y. Call*, October 20, 1922.)

it. For this reason problems of the division of income are also problems of the division of the goods of society.

Contrast between Money Income and Goods Income. A person or a group may actually have a large money income and yet be poor in goods; or he or it may have a small money income and yet be able to maintain a fairly high level of living, that is, may have large receipts of food, clothing, and the other things we live by. For in the first place, we differ in our ability to turn our money incomes into goods—we are more or less wise in choosing, more or less efficient in spending and using. In the second place, the purchasing power of money changes from time to time so that \$5 in 1929 may not have the same goods value as \$5 in 1934. These considerations are important because practically all of our income is expressed in terms of dollars.

THE RIGHTS ATTITUDE TOWARD THE DISTRIBUTION OF INCOME

Argument that "Whatever is, is Right." Ever since the Middle Ages men have argued that whatever distribution of income happens to exist is right and is the will of God. In the past poverty was often regarded as simply one aspect of the problem of evil in the world, along with sickness and sin. The proper attitude was to give alms to the poor, to relieve suffering whenever possible, and to trust that justice would be done—if not in this world, then in the next.

Eighteenth-Century Idea of Natural Rights. In the eighteenth century the social revolutionists attempted to turn this religious argument against its authors. God had intended, they said, that every man should have an equal right to life, liberty, and the pursuit of happiness. Everyone therefore had a divine or natural right to at least the means of livelihood. But the issue was not one that could be settled by theoretical argument, since no one could prove, either by Scriptural quotation or otherwise, what the divine plan was.

Present-Day Appeal to Rights. Humanitarian theorists who oppose unequal distribution of income usually do so with rather unconvincing arguments. Many clergymen insist that injustice is a violation of God's will and that the poor have a *right* to more than they receive. Other social reformers likewise appeal to rights to justify their proposed redistribution of wealth. Some of them, attempting to prove that all wealth is produced by labor, insist that labor has a right to all wealth. The capitalist finds it easy to reply that they have overlooked the services of capital and skilled management in producing the wealth. Thus the whole question is once more confused.

Unsatisfactory Nature of the Rights Argument. In short, the concept of rights gives no clear basis for reasoning about the division of income. It is almost impossible to prove anyone's inalienable right to anything. If we appeal to existing property rights and trace them back to their origin, most of them are lost in doubt at the source. Usually they are found to have been established in the first place by an indefensible act of violent seizure—if only from a savage owner—or quite as indefensibly by a royal grant from a king whose right to make such a grant is itself doubtful. In any event, the question arises, Why should twentieth-century society be bound by such conventions?

If we look at the processes of acquiring wealth going on at present to find out who is really earning this or that, and thus who has a right to it, we are at once involved in a maze of difficulties. In our complex economic life it is almost impossible to trace the productive origin of a single item of wealth to any individual or even to any group.

THE CONSEQUENCES ATTITUDE TOWARD THE DISTRIBUTION OF INCOME

Rights versus Consequences. In order to make practical social progress we must look to *consequences*, not to rights; in other words,

to the future of society, not to the past. For example, if people discuss whether or not the House of Lords should continue to exist, few of them would argue on the basis of feudal rights; instead, they would attempt to show that the House of Lords plays or does not play a useful and beneficial part in government. Similarly, people are now examining the problem of dividing the income more and more from the viewpoint of the probable results of allowing one man or one group to have so much and another man or group to have so little. This does not prevent differences of opinion, of course, but it puts the arguments on a firmer basis.

Attitudes toward the Present Distribution of Income. Among those who have abandoned the rights notion, few approve thoroughly of the present way of dividing society's income. Even many of those who are satisfied with their own shares and would not wish any change for themselves believe that the present situation is far from ideal. One does not have to look far to see people enjoying advantages they have not earned by any service to society. Still more in evidence are the poor who seem to suffer through no fault of their own; often they are apparently people of talent, able to do great things if they only had the economic means for developing what is in them. A person must be complacent indeed to feel that his own good fortune is a reason for defending the present state of affairs. The wide extent of extreme poverty coupled with the great wealth of a few people that now exists is not a lovely thing. Students of social welfare who think in terms of consequences are by no means agreed, however, that society should make a conscious attempt to change the division of the social income. Several arguments are advanced to show that society should keep hands off the present system of competitive wealth-seeking.

Argument of Laissez Faire. Economists who follow Adam Smith argue that the wisest thing to do is to follow the policy of laissez faire. Let things alone! They feel that freedom for all men to engage in economic activity as they please, provided they do not violate the law, will lead to the greatest increase in wealth and consequently the "greatest good of the greatest number." Such thinkers do not *want* unequally distributed income, but they insist that any attempt by society to regulate the division of the social income would so burden enterprise that much less wealth would be produced and consequently all levels of living would be lowered.

Many years after Adam Smith, Charles Darwin argued that human progress had come about through the elimination of the unfit, of the inferior individuals in each generation. Taking his idea over into economic life, one might argue that it would be well to allow poverty and starvation to destroy the weaker members of society in each generation, heartless as it seems, for thus a new generation of superior human beings would arise.

Those who oppose social action in the redivision of income maintain also that the free acquisition of private property has been a valuable achievement of the human race in its progress from primitive communism to the present era. They declare that the hope of gaining wealth brings out the greatest exercise of individual initiative. Without such incentives, they claim, there would be partial stagnation. Much may be said for this point of view.

The opponents of *laissez faire* insist that although the hope of gain is an incentive to effort, it is not the only incentive. Even if the hope of gain were entirely eliminated, many people would continue to work—perhaps not so hard, but still with enthusiasm—because of their enjoyment of work for its own sake. Other motives, such as the desire to win honor and respect in common enterprise, as well as the desire to serve, could also be relied upon to arouse effort. Suppose, then, they declare, that the motive of gain were not entirely eliminated, but merely diminished by setting limits to the amount that an individual could amass. Sufficient incentive might still remain to call forth all the efforts that would be needed in production.

Argument That Present Distribution Prevents Economic Coördination. The lack of coördination in our economic system as a cause for depression and suffering has been repeatedly pointed out in preceding pages. Certain authorities maintain that the present distribution of income brings about the downward swing of the business cycle and thus hampers national productive activity and checks the increase of national wealth. The result is a lowering of all levels of living. Apparently an increasing number of people are taking this viewpoint. Already various sorts of social control in the distributive process have modified or displaced *laissez faire*. People of intelligence are now aware that distribution and production are intertwined and that the course of the one affects the success of the other.

GOVERNMENT REGULATION OF DISTRIBUTION
AS A REALITY TODAY

Impossibility of Absolutely Free Competition. Absolutely free competition as thought of ideally has never existed. Large groups of individuals, corporations, and trade unions, it is true, struggle with each other in society's markets for a larger share in the proceeds of industry. But the struggle is not free competition, for some of those engaged in the conflict have distinct advantages amounting to partial monopoly, and where monopoly exists competition cannot be "free."

As the fight goes on, governments therefore are forced to act by way of mediation and regulation in order to prevent the destruction of society. Moreover, the complexity of industrial processes requires increased supervision by government in order to make the wheels of industry run smoothly. Much must be done each year by our legislatures to regulate the thousand different phases of industry, such as the imposition of taxes and tariffs, the inspection of foods and drugs, and the fixing of prices and standards of service and quality. A government may undertake such activities without the citizens suspecting that it is redistributing income, but the Government is actually engaged in such work whether its policies are so intended or not. In fact, nothing important can be done to production without affecting the division of rewards.

Realistic Approach to the Problem of Distribution. From the foregoing considerations two conclusions inevitably follow. In the first place, it is no longer necessary to discuss whether or not the division of wealth should be regulated by the Government; the fact is that government *must* do so and actually *is doing so*. The problem is rather *how* the Government should regulate the division of income and *to what extent*.

In the second place, one cannot go far in one's thinking without first considering how the division of income actually goes on under our present arrangements. What is the process by which goods are distributed among the members of society? Or rather, since the division of income is not a process by itself, but merely a part of the industrial process as a whole, how do industry and business come to give large incomes to certain individuals and small incomes to others? Until we know the answers to these questions, we have no basis for saying

that the present scheme is good or bad, or for determining at what critical points it needs to be strengthened or broken through.

SUMMARY

Income is the total volume of goods and services received. It is generally represented by money, which keeps it in a fluid state and promotes exchange. For a long time discussion of the justification of a given distribution of income among the inhabitants of a nation was in terms of *rights*. This standard never provided a basis for adequate treatment; it was one assumption against another.

It is more fruitful to examine distribution in terms of *consequences*. Few people today think that the present distribution of social income is wholly desirable. Some say, however, that competition must take its course in order to produce the maximum of wealth and to give incentive to the able. Others reply that there are nobler incentives to industry, and that economic coördination—our greatest problem—can be secured only by increasing control in the public interest. The latter viewpoint seems to be making some headway.

Realistically considered, absolutely free competition is impossible, and public regulation shapes the flow of income at hundreds of points. The problem, then, is: first, to find how distribution is effected today, and second, to determine what course regulation should take. We cannot assess the worth of our present plan of distribution until we see how it operates.

QUESTIONS AND PROBLEMS

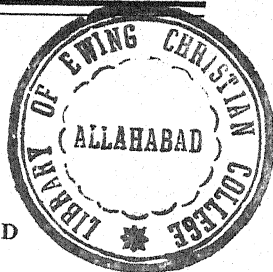
1. What is wealth? Give examples of wealth in the classroom. Mention personal services you have received during the past week. Define *economic goods*.
2. As used in this chapter, what does the word *income* mean? Distinguish between money income and real income. Which would you rather have—a large money income or a large real income? What part does money actually play in income?
3. Explain, with illustrations, the difference between consumers' goods and producers' goods. Under what circumstances can an automobile be a consumers' good? Under what circumstances can it be a producers' good? Can both kinds of goods be income? Explain.
4. When is income liquid? When is it fixed or solid? Of what advantage is liquidity in income? Illustrate. Which is usually more liquid, the ordinary income of a farmer or the ordinary income of a lawyer?

5. Review briefly the facts on the distribution of income in the United States (Part. Two). In your judgment what would be a fair division of society's income? Explain the term *society's income*.
6. State the two chief arguments against all attempts by society to change the present division of social income. How would you answer each of the two arguments?
7. What is meant by a *right* to private property? Point out the strength and the weakness of the claim to such a right.
8. How is the concept of *rights* defective as a basis on which to evaluate or modify the present division of society's income? Can you suggest a better standard? Explain.
9. How do private property and free competition stimulate economic progress? Suggest incentives to economic effort that might serve as satisfactory substitutes for the hope of gain. Mention economic evils that are sometimes caused by the lure of profit.
10. Discuss the theory of *laissez faire*. What seem to be the main strength and the chief weakness of the theory?
11. Tell how government is necessarily involved in the division of society's income. What problems inevitable arise from government activity in economic matters?
12. Explain why, under the present economic system, large private incomes tend to increase much more rapidly than small incomes.
13. What is the realistic approach to the problem of distributing social income?

READINGS IN THE CLASS LIBRARY

1. "Impersonality of Modern Industry," L. M. Powell, Hill, *Readings in Vocational Life*, pp. 219-24.
2. "Industrial Disputes in the United States," R. F. Couch, *ibid.*, pp. 230-31.
3. "The Industrial Creed of a Capitalist," J. D. Rockefeller, Jr., *ibid.*, pp. 233-34.
4. "The Relation of Labor and Capital," Abraham Lincoln, *ibid.*, pp. 235-36.
5. "The Circulation of Wealth," Clay, *Economics*, pp. 214-28.
6. "Wages and Income," *ibid.*, pp. 279-85, 289-91, 301-03.
7. "The Share of the Owners," *ibid.*, pp. 314-20.
8. "Welfare and Inequality," *ibid.*, pp. 401-07.

Chapter 20



HOW INCOME IS DISTRIBUTED

DISTRIBUTION OF INCOME BY PRICE TRANSACTIONS IN THE MARKET

Price Advantages Due to Monopoly of Supply. Power over either the supply of or the demand for the commodity being dealt in gives an advantage in any market. The most common advantage lies in the *control of supply*. When a producer or dealer can restrict the amount of a commodity which comes into the market and when the desire for the commodity remains undiminished, an increase in its price is almost certain. When this occurs, the increased price goes to the owner of the commodity in exchange for his rights of ownership. Even the power to reduce by a hundred bushels the normal daily supply of potatoes in New York City would influence the price, although the influence might be so slight as to be difficult to discern.

Price Advantages Gained without Monopoly. Monopolies of all kind use the foregoing device to increase their incomes. But one need not be a monopolist in order to have an advantage in the market. Whenever the supply of a commodity is diminished for any reason whatsoever, its price is affected in a way that is beneficial to the owner. Under such circumstances the bargaining position of the buyers is weakened, because the supply of the commodity is less than the amount wanted, that is, *less than the amount wanted at the old price*. Even at the old price not everyone can share in the commodity, for the supply is not large enough to go around. And the attempts to share in the supply, which are seen on the market in the bids of buyers, result in an increase of the price. As the price rises, buyers become

discouraged and drop out of the bidding, one by one, until the new price equalizes those who are willing to pay and those who have goods

to sell. This is to the advantage of the seller, for he receives the increased price and thereby enlarges his income.

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CURBS DIAMOND CUTTING.

Belgian Syndicate to Operate Two Weeks Monthly—32,500 Affected.

BRUSSELS, Dec. 11 (AP).—The 32,500 workers in the diamond industry in Antwerp and neighboring communities have accepted a recent decision of the diamond cutters' syndicate to cease work completely for two weeks of every month until the diamond markets recover completely.

All diamond plants have come to a standstill since yesterday, which means a loss of \$450,000 in wages monthly to the employees, of whom only 15,000 receive regular relief payment from their unions. An emergency fund was instituted, however, to pay special allowances to the most needy among the non-union workers.

The diamond cutting industry in Belgium has been heavily hit by a falling off in the purchase of diamonds, particularly since the Wall Street reverses.

It is undoubtedly true that control over supply brings a large degree of control over price. What effect does this control, as practiced by the diamond cutters syndicate, have upon consumers and workers? (From *The N. Y. Times*, December 12, 1929.)

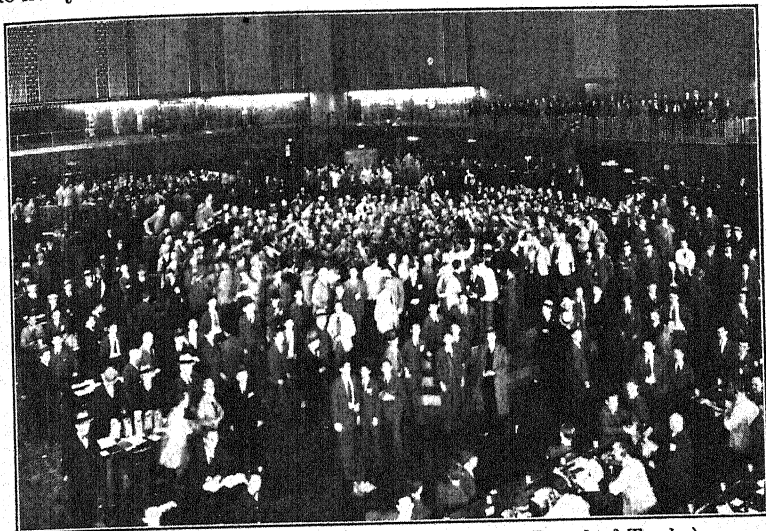
used as the basis of dealing in future contracts for the commodity involved. If supply changes, price will change, moving either up or down as supply goes down or up. A man may buy if he thinks the price will rise; if he has judged correctly, he will gain.

A social purpose is served by such speculation. For example, if speculators anticipating a shortage of wheat buy briskly for a time when the crop comes in, the price will surely rise; and the very fact of its rise will tend to check buying. In consequence the consumption of

How Price Positions Affect Us All. Thus the services all of us render and the goods all of us sell have their prices placed upon them according to market positions. By the same process, these positions place the prices on the goods we must buy, and the prices we have to pay help to determine how great a quantity of goods we can have, that is, what our level of living is to be.

Income Gained by Anticipating Price Changes. Another way of increasing income common to our economic life is by anticipating changes in supply. When such a change can be forecast with anything like certainty, the forecast can be

wheat is retarded before the actual shortage occurs. Similarly, if speculators think that the price will fall, they begin to unload or *sell short*, that is, they contract to deliver wheat in the future which they do not yet own, but which they expect to be able to buy cheaply when



The Chicago Wheat Pit. (Courtesy Chicago Board of Trade.)

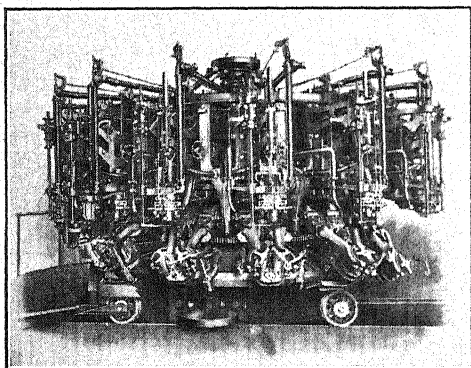
the price falls. As a result prices fall, consumption is stimulated, and the stock of wheat is used up before the new crop reaches the market.

Everyone Joins in Speculative Anticipation. Speculative anticipation is not confined, of course, to professional brokers. All of us anticipate more or less and arrange our buying and selling activities according to the changes that we expect will occur. We have shown how price-forecasting is an essential part of every business program. And in personal affairs most people defer or hasten purchases of coats or dresses or what not, according to their notion of what is going to happen to prices. In this way incomes are increased or decreased.

Advantages of Superior Productivity Depend upon a Favorable Price Position. Superior productivity yields greater income only in so far as it affects the market position of the producer. For example,

if a business firm engaging in the manufacture of shoes invents some contrivance that greatly increases its efficiency, of course the effect is to put the firm in a new relationship to the market. As a result of the new invention, the firm may reduce the cost of the shoes it makes to the point where it can either cut the price below the level its competitors can reach and thus secure, if it cares to do so, a much larger distribution of its product; or it can continue to sell at the old price and make a much larger profit on each pair than before. In either case it gains enormously.

The advantage thus gained, however, is likely to be temporary. Sooner or later the competing firms will use the same or a similar



The sudden introduction of a machine like this influences income tremendously. This glass bottle machine is 41 times as productive as the hand process. The lucky manufacturer who utilizes such a machine before his competitors do likewise produces his goods for less, and can either undersell or have a larger margin of profit on every article he sells. (Photo Owens Bottle Co.)

contrivance or process and thus put themselves in as favorable a situation. What may delay this result is protection by patent or by the attainment of virtual monopoly, which makes any competition ineffective unless established on a grand scale. In the meantime the firm can make the most of its advantage. In a sense the profits are the fruits of productivity, because at the same time that the consumer is buying his shoes for the same or a lower price the firm is being enriched.

Often, however, a producer receives no considerable share of the gains due to his increased efficiency. An unfortunate position in the market may force him to hand over the profits to someone else; thus the farmer, as we have seen, increased his productive efficiency between 1922 and 1929, but his inability to keep farm prices on a level with other prices seriously curtailed his real income. He handed over to middleman, transporter, and consumer the benefits of his improvements.

EFFECT OF CUSTOM AND LAW UPON THE DISTRIBUTION
OF INCOME

How Custom Controls Prices. A price advantage once gained in the market may be made more or less permanent by social habit or custom. The five-cent loaf of bread was for many years an established custom. It required an exceedingly strong position on the part of sellers to raise the price after the many years during which the price had remained unchanged. But once the custom was broken, the price shifted upward and downward with little difficulty.

Similar to a fixed price is any kind of habit or custom, for a habit is likely to make buyers weak and sellers strong in bargaining and therefore to affect their respective incomes. Customs may of course be more than habits, as when a kitchen has been equipped for gas cooking; under such circumstances the bargaining power of the consumer is weak because he feels that he *must* have gas and he would not stop using it if the price were to double. But frequently we observe customs that are mere matters of habit and not those of necessity; such is the custom of eating wheat bread. If cornbread would be cheaper, it is just as nutritious and people might without too great difficulty change over. Obviously, the advantage to sellers is almost as great when people only *think* they must have things as when they *really* must have them.

How Laws Affect Income. At times market conditions become so unfavorable to buyers that public authority interferes to hold prices down. Railway fares and electric and gas rates are regulated in this manner. In Chapter XV we pointed out that such regulation depends upon the public-utility concept, and that there is a need for the courts to expand that concept in response to recent economic changes.

But if consumers can sometimes persuade legislatures to hold down the prices, sellers also can sometimes persuade legislatures to hold up the prices. When a high rate is written into the franchise of a public-utility corporation, such as a street-car company doing a business for which it must have a legislative franchise, the price of street-car rides is determined by law. Many times in the history of American business, especially during the latter part of the nineteenth century, when municipal utility corporations were formed and when legislatures were not so careful as they have since become about protecting the public against the aggressions of private business,

legislatures have determined prices, and therefore have influenced consumers' income.

Then, too, discriminatory laws sometimes give one group an advantage over another group. For example, Congress levied a tax on the sale of oleomargarine that puts its sellers at a disadvantage. Some states have stringent corporation laws, child-labor laws, or wage laws that place their industries at a disadvantage in competing with industries in other states where laws are less severe. Banking laws have frequently been framed so as to increase the income of bankers at the expense of other groups. Our traditional tariff policy has usually favored manufacturers at the expense of farmers. Discriminatory laws mean that the market fight has been carried into the legislature. Sometimes the victory of one side has been in the public interest, as with child-labor laws, and sometimes not. The public can protect itself only by laying bare the true issues involved.

How Tax Laws Affect Income. Taxation is the chief weapon of government for redistributing income. Graduated income taxes, which take a higher percentage from the high-income groups than from the low-income groups, serve to do this. Of course, the taxes collected from the wealthy are not given out to the general population in the form of money, but the tax collections are spent for schools, roads, public health, and similar services which form part of the income of all those who are benefited by them.

Taxation also serves as a means of general regulation, and thus may affect individuals or groups. For example, Indiana placed a tax on chain stores so high as to discriminate greatly in favor of local business men. This tax measure was upheld by the Supreme Court. In the words of John Marshall, "The power to tax is the power to destroy," and when we realize this we see how much government can accomplish by the raising of revenue.

HOW GROUP BARGAINING AFFECTS THE DISTRIBUTION OF INCOME

Groups in the Market. As explained above, the distribution of income takes place in the market places of society. In the bargains made there people do not always appear as individuals, but often

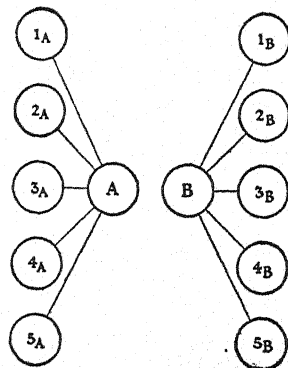
as groups joined by an identity of interests. The most important of such groups might be called *businesses*. For example, all the manufacturers of steel goods might unite in the market against the producers of iron or against the purchasers of railroad rails. Other important groups are labor unions, employers' associations, consumers' coöperatives, and farmers' marketing associations.

As used here, the word *group* means simply any aggregation of people who act together in any way that affects the market. People usually belong to more than one group; frequently they even belong to groups which act in opposition to one another, as when a person belongs to a labor union and at the same time owns a share of stock in a corporation that is fighting the union.

Groups Act through Representatives.

In the markets of today buying and selling operations are usually carried on by group representatives, and the individual functions only in choosing a representative. This situation is seen clearly when the selling agent of one concern deals with the buying agent of another; each represents the whole group engaged in the activities of the business. This situation may also be seen when the representative of a labor union bargains with the manager of a factory, the manager being perhaps only a hired representative of the owners—the stockholders.

The group relations of individuals usually change from time to time. One may work first for a sellers' association and then for a consumers' league. And groups themselves also shift in social significance. For example, banking businesses have become more important groups since 1850, and religious groups have declined in social importance since the Middle Ages; families are less significant groups in city life than in rural life; employers' associations and labor unions play a greater part in the economic world than they did a century ago.



In this diagram, A and B are face to face, bargaining with each other. A is representing 1A, 2A and so on, and B is doing likewise for 1B, 2B, etc. So far as the particular transaction goes, the decisions of A and B determine the welfare of 10 persons in addition to themselves. But consider the economy of effort attained thereby.

FACTORS FAVORING CERTAIN GROUPS
IN THE DIVISION OF INCOME

Importance of Ability to Take Advantage of Rapid Price Changes. No business can forecast completely the future trend of prices. Even when forecasting is possible, it does not help much if the prophet cannot act in accordance with his prophecy. Thus a business is most successful when it can adjust itself rapidly to changing price-levels.

Businesses vary in their adaptability to price changes as follows:

1. A business which sells directly to consumers cannot make rapid changes in its prices, because retail prices tend to become fixed or stationary; hence it is not adaptable to price changes.
2. A business which has heavy overhead costs cannot adapt itself readily to price changes, for high overhead costs are caused by large permanent investments and therefore cannot be suddenly reduced.
3. A business with a slow *turnover*, that is, which takes a long time to produce and sell its stock, cannot make rapid readjustments to price changes.

Favorable Position of Manufacturers. Manufacturers are a favored lot. Their prices rise and fall faster than retail prices or the prices of farm products, thus giving them a marked advantage in the market. They turn their stocks over three or four times a year. Their overhead is lower than that of the farmer, although somewhat higher than that of the retailer.

Position of Retailers. The retailer's position is moderately advantageous. He is handicapped by customary prices, but has adjusted himself in a measure by the development of chain stores and department stores. His turnover is faster than that of the manufacturer and his overhead costs are less.

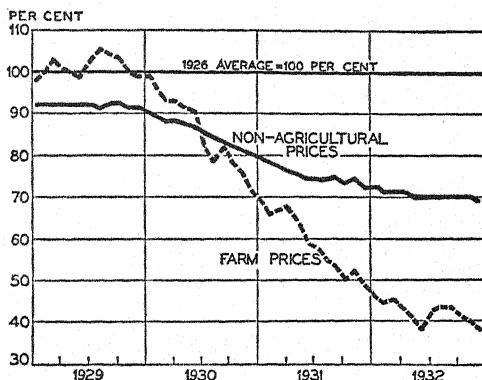
Poor Position of the Farmer. The farmer is in the worst position. His prices are less flexible than those of the wholesaler. He is fortunate if he has as many turnovers in ten years as the manufacturer has in one year. For obvious reasons he requires much more time to mature cows or orchards, or even grain crops or vineyards, than the manufacturer needs to make shoes from leather or bread from flour. Slow maturity means that overhead costs are high because permanent investments must be large. A farmer must often continue to invest in an orchard for years before he receives much in return.

Advantages of Dealing in Staple Articles. Market advantages depend upon the nature of the good or service. If the good or service is one for which the public demand is fitful and capricious, like women's clothing, the industry is likely to be somewhat unstable, with a high bankruptcy rate but also with the possibility of immense gains. Most luxury goods are in the same class. The demand for such goods is very elastic and hence expenditures for them are apt to be reduced first when a need for economizing arises.

Goods like bread, salt, sugar, and common clothing, on the other hand, people must al-

ways have, regardless of what else they do without. The demand for such goods is inelastic and therefore the business of providing them is apt to be steady; if the profits are low, they are also likely to be regular. The advantages in such enterprises are made plain by a study of the types of business that have grown vigorous and strong within the last few decades; most of them are engaged in making or handling necessities or what have come to seem necessities in our standards of living. On the whole the advantage seems to belong to the staples groups rather than to the luxury groups.

Advantages of Superior Unity. Certain groups also have an advantage in their superior cohesion or unity, for cohesion gives definite market power. The degree of unity seems to be determined largely by the physical conditions of the industry. For example, farmers tend to be disorganized by the fact that they have difficulty in getting together. Manufacturers and middlemen have much less difficulty, for they live in or near cities or towns and their businesses are of a sort that makes large-scale operations advantageous even if there were no market advantages in association. In



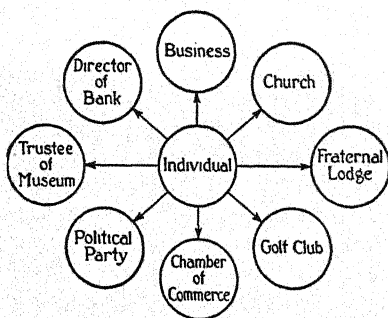
The unfavorable market position of the farmer is reflected in recent years by a progressive failure of farm prices to keep on a level with other prices. (F. R. Bank, N. Y., *Monthly Review*, February 1, 1933.)

consequence, they gradually cohere and form large-scale organizations more rapidly and more effectively than farmers. Once having formed such organizations, manufacturers and middlemen gain a great advantage in bargaining power over unorganized farmers on the one hand and unorganized consumers on the other.

THE PROBLEM OF INDIVIDUALS IN THE APPORTIONMENT OF INCOME

Varying Incomes of Individuals in a Single Group. The whole problem of dividing income cannot be understood, of course, merely by a study of groups and their relative advantages and disadvantages in the market, for individuals within the same group often share differently in the division. In addition to investigating the income of groups, we must also seek to understand why the incomes of individuals vary. Why are certain bankers richer than others? Why do certain storekeepers have large profits and others have small profits? Why do some laborers receive higher incomes than others?

Varying Group Attachments of a Single Individual. A grave difficulty is involved in disentangling almost any individual's group



This diagram does not portray all of the conflicting interests which exert pressure upon the individual. Instead of one golf club, there may be three seeking his membership, and so on.

connections. He may inherit income-bearing property; he may have a salary from a corporation; he may trade in some article or render some service "on the side." All such complications are confusing to one who is trying to understand the problem of income, yet the incomes of many people have diverse sources. If we want really to know the forces that make differences among income-receivers, we must begin with the individual and trace the sources of his income, then

study the market advantages possessed by the various groups from which his income flows. We may then return to the individual

and investigate (1) the reasons for his group connections and (2) the advantages possessed by him over the other members of his group.

How an Individual Gets into a Favorable Group. Belonging to a well-situated group is in itself perhaps as great an advantage as an individual can have. A person gets into such a group in various ways. He may be born there, so to speak, or he may be helped there by some friend or relative. Again, he may by a combination of brains and hard work force himself into the group. If we want to know why A is a banker and receives a large income, and also why B is a banker and receives a larger income, no general principles will provide the answer. Only a study of A and B, of their influences, make-ups, histories, and activities will enable us to arrive at an understanding of the difference between them.

Wealth by Inheritance. A considerable part of the total income of society goes to the members of families of wealthy persons or to philanthropic or educational institutions in titles to property which may be transformed into whatever kind of wealth the owner desires. By this right of transference the *leisure class* of society for the most part is created and maintained. Its members have incomes which they have not directly earned. The merits and demerits of this practice were considered in the chapter on riches.

SUMMARY

Income is distributed by means of price transactions in the markets of the world. A price advantage may be the result of control over supply or demand, a favorable situation in regard to supply or demand, a shrewd guess as to price change, superior productive capacity, or a combination of several or all of these factors.

Custom and law consolidate, create, or remove price advantages. Laws regulating prices are increasingly important. Taxation is a powerful instrument for redistribution of income and for exerting social control over income and economic activity. Most laws which affect income represent the superior strength of the group whose income is favored by the laws.

The division of income among groups is more significant than the division among individuals. One business against another, industry against agriculture, capital against labor, are the focal points of

bargaining struggles in modern economic life. Some groups are favored in the struggle. The ability to meet price changes favors manufacturers over retailers, and the farmer's inability to make similar adjustments places him at a severe disadvantage. Discriminatory laws and superior unity favor certain groups.

So far as division of income among individuals is concerned, success depends upon membership in favored groups or upon being more fortunate than other people in the same group. Such results take place through a combination of circumstances too complex to analyze.

QUESTIONS AND PROBLEMS

1. Tell how the control of supply affects the division of society's income. Explain how prices determine a person's income.
2. Show how anticipation of changes in supply may increase a person's income. What social service is sometimes rendered by speculators who *buy long* or *sell short*?
3. Explain the part played by inheritances in determining the division of income.
4. "Superior productivity yields greater income only in so far as it affects the market position of the producer." What does this quotation mean?
5. Explain with original examples the connection between social habit, law, and prices.
6. What are the fields of price-fixing, and the chief obstacles to broadening these fields?
7. How do laws discriminate against certain groups?
8. What is *group bargaining*? How does it affect the distribution of income? Tell how the extension of collective bargaining between employers and laborers may increase the struggle in the goods market and reduce the tension in the labor markets.
9. How does the nature of the article offered for sale or the character of the service proffered affect the bargaining position of a group? Give examples.
10. What three factors affect the capacity of a business to adjust itself to changing price-levels? Explain each, mentioning concerns in your community that stand high in the various factors.
11. In a time of rapidly changing prices which occupies the most advantageous position: (a) the farmer or the manufacturer, (b) the wholesaler or the retailer?
12. Explain with an illustration the meaning of the word *turnover*. Tell why numerous turnovers of merchandise are advantageous to merchants. Are rapid turnovers of the sales force advantageous?

13. Explain the effect of large-scale, closely knit organizations of producers on the division of the income. Which of the following has the strongest position in so far as organization is concerned, the manufacturer, the farmer, or the consumer? Which has the weakest position? Give reasons.
14. Explain with illustrations this statement: "The power to tax is the power to destroy."
15. Why is it more important to study how income is apportioned among groups than it is to study how it is apportioned among individuals?
16. What makes the study of individual apportionment so complex?

READINGS IN THE CLASS LIBRARY

1. "Distribution of Wealth," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 815-20.
2. "Distribution of the National Income," W. I. King, *ibid.*, pp. 822-27.
3. "Interest," Weld and Tostlebe, *A Case for Economics*, pp. 374-93.
4. "Wages," *ibid.*, pp. 394-415.
5. "Methods of Social Control of Industry," Clay, *Economics*, pp. 129-33.
6. "Why Interest Is Paid," *ibid.*, pp. 320-27.

Chapter 21

WHAT GOVERNMENTS DO TO DISTRIBUTE INCOME WISELY

REVIEW OF THE PROBLEM OF DISTRIBUTING INCOME

Necessity for Redistributing National Income. In Part Two we saw the extremely unequal distribution of wealth among various individuals in the United States. Later on we saw that certain large groups, such as industry, received a far greater share of the national income than other groups, such as agriculture. When we traced the *consequences* of such inequality, we learned that it not only worked evil upon the members of the less favored groups, but also threw the entire economic mechanism out of gear from time to time. It is clear that changes are needed in order to provide higher levels of living.

We have also described the economic processes by which the national income *is* divided. Such a description has shown us that each person does not always receive what he deserves. For in the first place, economic activities are so complex that it is impossible to measure the contribution which each individual or group makes to social wealth and welfare. In the second place, wealth often comes to people because they are good profit-seekers, and profit-seeking at times is not in accord with the public interest. In the third place, certain groups, such as the farmers, are at a serious disadvantage because of their inferior bargaining power in the market, and they therefore receive less income than other groups, although no one would deny that their work is as necessary as any work could be. Thus our study so far has shown the need for a wiser and more equitable distribution

of income, whether we measure conditions (1) by the processes used in dividing income today or (2) by the consequences of the present method of distribution.

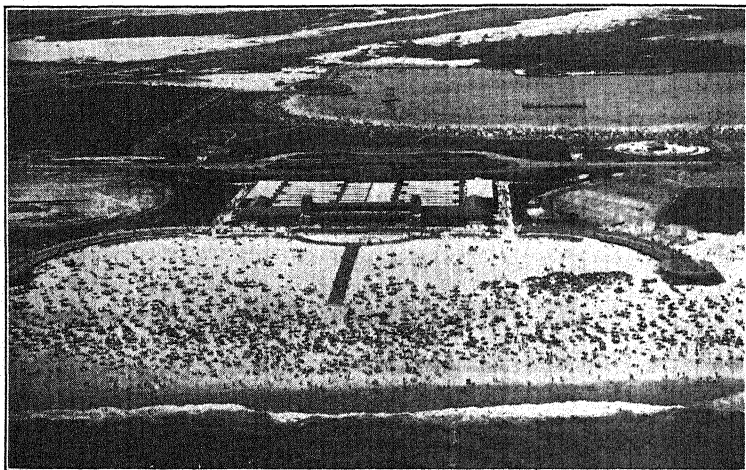
Government and the Distribution of Income. Our study has shown us that most income is divided in the market place by the free play of enterprise, and that government has for the most part maintained an attitude of *laissez faire*. But we have also seen that in many instances government has made and enforced laws that affect the distribution of income in one way or another. We have stressed the need for social planning and control to displace unregulated competitive profit-seeking. Since government is the most powerful and all-embracing single agency of social control, an examination of what it does to divide income wisely will be helpful not only as a statement of existing facts but as an indication of fruitful policies for the future.

Government does not operate in an isolated realm. Its activities form an integral part of the operation of economic affairs. We have already described many of the effects of its activities upon economic life in our treatment of the functioning of our economic system. Nevertheless a review focusing attention upon governmental activities affecting the distribution of the national income will be useful.

HOW GOVERNMENTS DIRECTLY INFLUENCE THE DISTRIBUTION OF INCOME

Laws Favoring Private Charities. Governments now pass many laws protecting and favoring charitable and educational institutions. A number of these laws encourage private gifts to charity and education in several ways. In the first place, the national income-tax law allows exemptions for gifts made to recognized charities and educational institutions. For example, if Mr. Croesus makes \$5,000,000 in a year and gives \$2,000,000 away to his nephew, he must pay a tax on the whole \$5,000,000. But if he gives the \$2,000,000 to the Red Cross, his income tax is based upon only \$4,250,000, since 15 per cent of his income is exempt if given to charity or education. State income laws allow similar exemptions. Somewhat similarly, churches and schools, even private schools, are exempt from taxation. In the second place, the law permits certain types of gifts to charities which it would not permit otherwise. For example, the *rule against perpetuities* declares it against public policy for a man to

dictate the disposition of his fortune for an indefinite time after his death. If Mr. Croesus in his will leaves \$5,000,000 with a trust company, the interest to be paid every year for five hundred years to the oldest living descendant of Mr. Croesus, whoever that descendant may be from time to time, the law will not allow such a bequest; for society considers it dangerous for Mr. Croesus to dictate the use of



Jones Beach Park, Long Island, New York. This is one of the outstanding recreational projects in the United States. It is operated by the state of New York for its citizens. (Courtesy Long Island Park Commission.)

his property for five centuries after his death. But the law does allow Mr. Croesus to leave a bequest to a recognized charity for five hundred years or for perpetuity, and the law will see that money is used for the purposes which Mr. Croesus designates and for no other.

Other laws provide for governmental aid to private charities. Private hospitals frequently receive financial aid from states and municipalities. The state, the community, and even the nation give aid to the unemployed, although much of such aid is administered by private charitable agencies.

Public Services as a Means of Distributing Income. In addition, government actually takes away wealth from the strong and fortunate and places it at the disposal of weaker and less fortunate individuals. Such institutions as public parks, schools, libraries, and museums

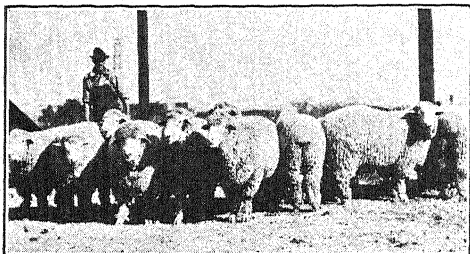
are available for all, and as a rule no attempt is made to restrict the individual's enjoyment of them, whether he has to support them or not. Such institutions are created for the public use out of public funds, and naturally the rich, who pay larger taxes, contribute most per capita. Along with such public benefits may be classed the educational scholarships which states and cities place at the disposal of students as well as the multitude of welfare activities carried on by state bureaus of various sorts for education, philanthropy, health, and enjoyment. In a sense all government activities for the welfare of the community represent a redivision of income.

Doubt may exist as to whether the poor benefit as much as the rich by the protection armies and navies afford to national property. Uncertainty may also arise as to whether the work of congresses and legislatures is carried out without favoritism. Generally the burden of supporting such activities falls more heavily on the poor citizen, who usually feels a small tax more heavily than the rich man feels a large one. But the rich pay higher taxes per capita, and no attempt is made to give them benefits in exact accordance with the amount they contribute. In other words, the rights of private property are more or less forgotten: wealth is poured into a common treasury, and expenditures are made for the welfare of such members of society as the Government decides to benefit.

Graduated Income Tax. The process of redistributing income through governmental action appears strikingly in the graduated income tax. Since the World War the United States and Great Britain have made great use of such a law, although not many years ago an income tax was regarded as a serious violation of property rights. The graduated income tax, which taxes the rich not only more than the poor because their incomes are greater but also at a higher rate, is clearly a device for taking wealth from the rich and giving it to the poor, although of course the proceeds are not handed out in cash among the poor, but are devoted to social enterprises in which the poor benefit out of all proportion to the taxes they pay.

Governments in Productive Enterprise. At times a government even embarks upon productive enterprises. In carrying on the postal system the Government conducts a productive activity that could be operated by private agencies. When a product or service is marketed and compensation received, there is income to be divided up. The Government, receiving compensation for its postal activities,

has an income to divide among the employees who do the work. Now how is the income divided? By what we call the civil-service



The Government actually carries on agricultural operations on a considerable scale—not in competition with other farmers, because the experimental feature of Government farming is most prominent. But it often raises products to sell. This is a pen of yearling Columbia rams produced at the Dubois, Idaho, Sheep Experiment Station. They were sold at the National ram sale at a record price. (Courtesy U. S. Dept. of Agr.)

system; in other words, by the estimated value of the service each individual renders, as judged by those in authority.

When a government engages in production, it influences the division of income in other ways than paying out wages, for it also determines who shall pay for the cost of the services and how much various groups shall pay. For example, if a private concern carried on the postal service, it would probably try to

charge as much as the traffic would bear, and all of this would be paid by those who use the mails. The Government, on the other hand, may decide to support the postal service partly by charges (sale of stamps) based upon services to individuals and partly by general taxation based upon the income of individuals, regardless of how much they use the mail. By such an arrangement the postal service stands halfway between the public schools, which are wholly supported by all taxpayers, and private business, which is supported by those it serves.

Government enterprise influences the division of income in a third way. As we have seen, competitive profit-seeking may (1) influence the division of income and (2) reduce, through poor coördination, the total amount of national income to be divided. When a government occupies an entire field of enterprise, such as the postal service, complete coördination within the industry is achieved, partly due to centralized control and partly due to the elimination of competitive profit-seeking.

Strengthening Weak Bargainers. Governments have also influenced the distribution of income by strengthening the weak in a multitude of ways, thus helping them to obtain a greater share of

the national income. Antitrust laws have been passed to protect both consumers and small businesses from the domination of huge combines. Minimum-wage laws, legal restrictions on hours of labor, child-labor laws, and social-insurance plans help to prevent the strong and unscrupulous from pushing the weak too hard. Laws have been enacted to help to put the farmer on an equal footing with the rest of economic society.

THE PRESENT LIMITATION OF SOCIAL CONTROL AND THE NEED FOR ITS EXTENSION

Present Limitations of Direct Control. As we have just seen, governments directly influence the distribution of income in four ways: (1) charity; (2) public services; (3) taxation; (4) productive enterprise. Each of these methods has certain limitations.

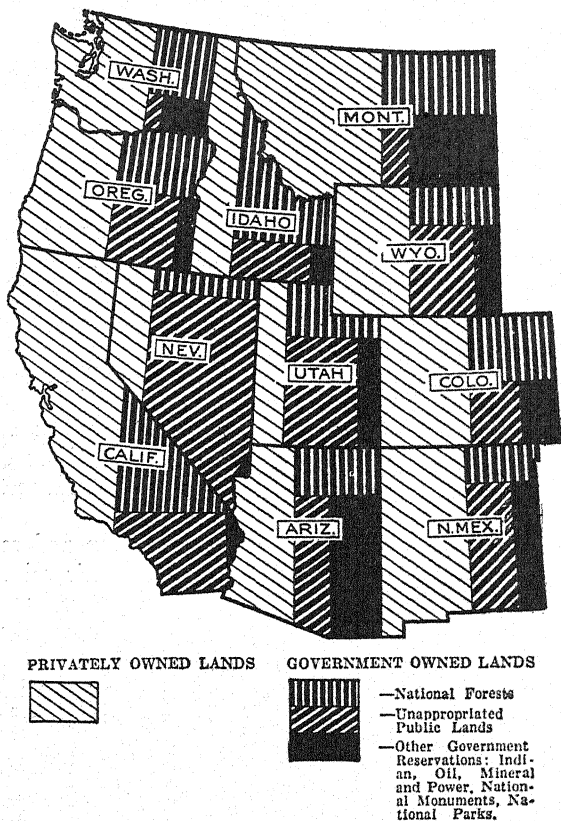
1. Charity affects levels of living very slightly and, as we saw in Chapter XVI, charity is hopelessly inadequate in times of stress. Moreover, our fundamental aim must always be to reduce the need for charity rather than to increase its sufficiency.

2. Public services offer opportunities of education and recreation to multitudes, but people must pay directly for their primary economic needs—food, shelter, and clothing. Furthermore, most people on the poverty level are unable to avail themselves fully of free services because their time is not their own. If you will recall the description in Part Two of urban and rural poverty, you will see that the expansion of the traditional areas of public service would not help people on the poverty level very much.

3. Like public services, taxation has very definite limits as an instrument of social control, because so far taxation has been used for public services only. In addition, the present economic process of distributing income through uncoördinated activity has elements of waste and disaster. This process is not changed much by taxing income *after it is acquired*; it is necessary rather to regulate methods of acquisition.

4. What governments can do by engaging in productive enterprise depends upon how much enterprise they undertake and how well they conduct their undertakings. At present private enterprise occupies the overwhelming majority of the fields which serve the economic needs of society.

REDISTRIBUTING INCOME



The federal Government is a large landholder in the western part of the United States. (From *The Nation's Business*, February, 1930.)

Present Limitations of Indirect Control. Indirect control has generally taken the form of strengthening weak bargainers. The two major groups who are unfavorably situated are the farmers and the wage-earners in industry. Neither of these groups has improved its relative position in recent years. In Chapter V we saw that the level of living of wage-earners rose with prosperity and fell with

depression, but that the *share* of the total national income going to wage-earners remained almost unchanged during the prosperity era 1922-29, while a constantly larger percentage of the national income went to those in the very high income brackets. It is also clear that the relative position of the farmer has become steadily worse year by year. Of course, if government had done nothing to help the weak, their lot would have been much worse than it now is.

Need for Expanding Social Control. The main difficulty is that social control has touched only the outskirts of economic activity, leaving the major portions free to run their planless course. In industry, agriculture, and finance the problem of coördination in the public interest is at the center of every well-thought-out attempt to raise the levels of living. Today few well-informed people believe in the possibility of such coördination without a larger measure of social control. To be effective such control must be exercised over the production and distribution of wealth and cannot be delayed indefinitely without serious peril to society.

SUMMARY

The greatest single instrumentality for social control of income is government. Governments redistribute income directly by aiding charity, by providing public services to all, by taxation based upon ability to pay, and by engaging in productive enterprise. Governments also affect the division of income by strengthening weak bargainers—the farmer, the laborer, and the consumer.

Social controls so far have touched only the outskirts of the main problem in our economic life. Examination of the facts shows that recent years have brought no improvement in the positions of the strong and the weak. Nor has there been any serious attempt to modify the planless industrialism which prevents us in good times from making the most of prosperity and which throws us into periodic depressions. In order to secure a better distribution of the national income an expanding use of well-established principles of social control seems desirable.

QUESTIONS AND PROBLEMS

- 1 Which of the following statements seem to you most important as arguments for wider governmental control over the distribution of income: (a) A few are very rich while a great number are very poor.

- (b) The present methods of distribution reward many for antisocial actions and fail to compensate others for very useful work. (c) The present methods of distribution injure industry by failing to coördinate production and consumption, thereby lowering all levels of living.
2. Which of the following do you think more desirable, assuming either to be possible: (a) A society in which every individual had approximately the same income, and all were on the comfort level; (b) a society in which five-sixths were on the comfort level and one-sixth were very wealthy, there being no poor?
 3. What effect has the law upon gifts for charitable purposes? Do you think that it is wise to make an exception to the *rule against perpetuities* in the case of charitable institutions? Give reasons pro and con.
 4. Describe ways in which governments redistribute income. On what theory can you defend taking from the rich and giving to the poor? If you admit the validity of this practice, do there seem to be any limits to its propriety short of making all incomes equal? What limits would you set, and what considerations would guide you in your decision?
 5. What is a graduated income tax? Explain by reference to the present national income tax. Does your state have an income tax? If so, is it graduated?
 6. Mention several productive enterprises of the national or a state or local government. Do you see any similarities among them?
 7. In what ways do government enterprises bring about a distribution of income different from that made by private enterprises?
 8. What seems to you more desirable, government enterprise or governmental control?
 9. List instances where a government has strengthened weak bargainers. Has the practice helped them?
 10. What is meant by the statement that the problem of the distribution of wealth and that of the production of wealth are inseparably interwoven?

Chapter 22

OUR GOVERNMENTS' SHARE OF INCOME

HOW GOVERNMENTS SERVE US

Government and Daily Life. What influence does government have upon levels of living? How does it affect American economic life? Does it render services for which the ordinary citizen should be required to contribute? Let us follow a citizen for a day and note what government does for him.

John Q. Citizen rises in the morning, bathes in water supplied by the city, eats a breakfast cooked over gas piped through municipally owned streets. He drives his car to his place of business over streets where traffic is regulated by the police. For daily safety he depends upon a corps of city employees—police, firemen, inspectors (elevator, boiler, food, and health). His office is in a building constructed according to city regulations, thus assuring him safety, light, and air. His children attend city schools and perhaps play on municipal playgrounds. His wife may shop at a municipal market, buying foods protected by laws of the national Government and ride home on a street car



Many people much more industrious than these two gentlemen express themselves in similar fashion. Here we have a failure to realize that without the services of government all of us would be living like primitive peoples. (By courtesy of the Philadelphia Public Ledger. © 1928 by Philadelphia Public Ledger.)

which operates under a municipal franchise. On a summer evening Mr. and Mrs. Citizen and their family may attend a municipal concert in a park owned by the city.

A country dweller may not have so much done for him by government as his city cousin, but nevertheless he receives many services. He drives over roads improved and maintained by the township, the county, or the state; sends his children to public schools; receives aid from a score of government experts regarding his own and his family's health, his crops, the health of his live stock, and the condition of the markets. In the summer both rural and urban dwellers may spend their vacations in one of the national parks, or they may travel abroad with the assurance of protection as citizens of the United States. Both share in the results of the investigations of the federal Government, and both benefit from the issuing of storm warnings, the control of epidemics among men and beasts, and the search for new and valuable crops.

The most important services of government may be classified as follows:

1. *Maintenance of law and order.* Without government each person would be forced to protect his own property and maintain his own freedom. This function is participated in by state and local governments as well as by federal authority.

2. *Police power.* When the welfare of the community is at stake, the government may override private property rights for protection of "health, welfare, or morals." This necessarily involves restrictions on the actions of individuals. Freedom does not mean that each of us ought always to be permitted to do just as he sees fit. A citizen is free to drive his automobile on the highways, but he must keep to the right when meeting other cars. He may operate a restaurant, but he must keep it clean. He may own land, but he cannot maintain on it a public nuisance. Such restrictions are all examples of the exercise of police power, which includes all governmental acts necessary to protect public health and morals.

3. *Enforcement of contracts.* All economic life operates on the basis of contracts. Government, through the courts and through executive enforcement, may therefore play a part in every business transaction.

4. *Education.* This highly important service is participated in by federal, state, and local governments, in different proportions, the chief responsibility, however, falling upon the local units.

5. *Relations with other nations.* This involves making treaties, settling disputes, and caring for our citizens abroad. With the growing interdependence

of nations and with the larger part which the United States has had in world affairs since the World War, foreign relations have become of great importance. This service is performed entirely by the federal Government.

6. *National defense.* The maintenance of an army and a navy is for the purpose of defending the nation from all attack and to enable it to carry out its policies.



Perhaps private business may be relied upon to render services to individuals who pay immediately in proportion to the benefits received. But clearing the streets is a service to everyone, and no particular person receives a tangible benefit that can be measured by money. For such services, we have relied upon governments for many decades. (Courtesy Caterpillar Tractor Co.)

7. *Economic services.* The post office, operated by the national Government, renders an important contribution to the life of the nation. States, counties, towns, and municipalities in various degrees also carry on important services, supplying water and gas, transportation and storage facilities, producing power, and marketing goods.

8. *Regulation and control.* Aside from police control there are less frequent but equally important governmental controls over business. The most widespread of these are (a) the regulation of competition and (b) the regulation of production and prices. All of these have been explained in previous sections of this book. It is to this sort of government activity that we must look for significant modifications of our economic life in the future.

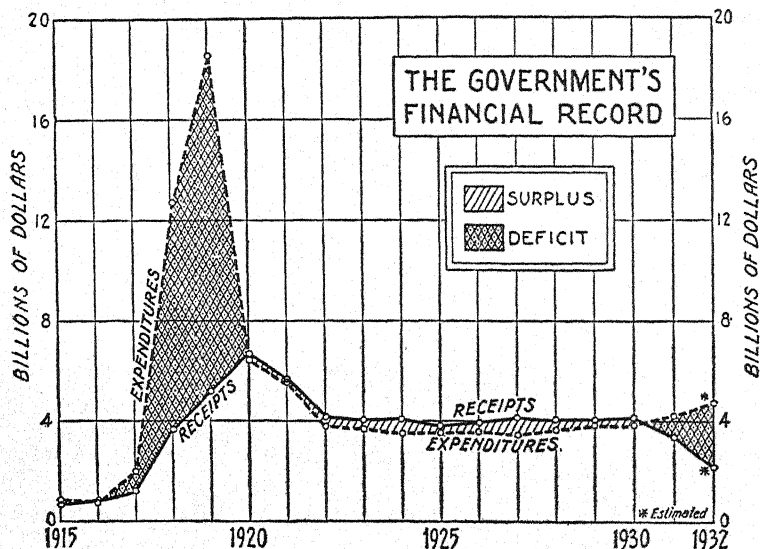
Division of Services. The foregoing services are divided largely according to the political divisions within our nation. Some are

performed by the national Government, others by the several states, and many by such local units as counties, cities, and towns. We shall now turn to an analysis of the expenditures of these various agencies.

HOW PUBLIC FUNDS ARE SPENT

Expenditures of the Federal Government. The trend and distribution of federal expenditures is shown by the table on page 415.

Table 31 gives the expenditures in current dollars. But the real increase is shown in the per capita cost, which, adjusted to 1913



This chart shows the relationship between expenditures and receipts. Between the years 1917 and 1920 there was a decided increase in expenditures over receipts. Much of this could be accounted for by our participation in the World War. During normal times the two lines run along close together. (From *The New York Times*, June 12, 1933.)

prices, was \$7.17 in 1913, \$22.11 in 1925, \$23.39 in 1929, and over \$36 in 1932. What has caused this increase? In the first place, the table shows enormous and increasing expenditures for the costs of war and national defense; the first four items in the list are due chiefly to war and the need for security against war, such costs having risen from

\$487,000,000 in 1912 to \$2,227,000,000 in 1932! And the 1932 dollar had almost the same purchasing power as the 1912 dollar. Expressed in percentages, the costs of war were 69 per cent of the total federal expenditures in 1912, 76.6 per cent in 1922, and 62 per cent in 1932.

TABLE 31

DISTRIBUTION OF FEDERAL EXPENDITURES, 1912-1932 ¹

<i>Items of Expenditure</i>	<i>Amount in 1912 (Millions)</i>	<i>Percent- age of Total</i>	<i>Amount in 1922 (Millions)</i>	<i>Percent- age of Total</i>	<i>Amount in 1932 (Millions)</i>	<i>Percent- age of Total</i>
National defense	\$284	40.2	\$ 814	21.7	\$ 721	16.2
Veterans relief	153	21.7	660	17.6	989	22.3
Interest on debt	22	3.1	989	26.3	605	13.7
Principal on debt	28	4.0	422	11.2	412	9.3
Farm aid	19	2.7	144	3.8	488	11.0
All others	220	28.3	729	19.4	1,219	27.5
Total	\$706	100	\$3,758	100	\$4,434	100

Table 31 also shows that federal expenditures for purposes other than war and security have risen rapidly. Outlays for farm relief and "all other items," chiefly law enforcement, public works, and administrative overhead, increased from \$219,000,000 in 1912 to \$1,707,000,000 in 1932, a gain of 779 per cent.

Expenditures of the States. The distribution of state expenditures is shown by table 32, which shows the increase in state expenditures, which in terms of the 1913 dollar were \$3.97 per capita in 1913, \$11.84 in 1929, and almost \$20 in 1932. Outlays for education lost first place after 1922 to those for land and improvements, which include the acquisition of parks, the erection of public buildings, and the development of public utilities. These are the major items in state expenditures, the increase in highway building, due to the widespread use of the automobile, being exceptionally large.

¹ These figures are from a study by Charles Merz, "The Cost of Government: A Triple Problem," in the *New York Times*, Apr. 24, 1932, sec. IX, p. 1.

REDISTRIBUTING INCOME

TABLE 32

DISTRIBUTION OF STATE EXPENDITURES, 1915-1930 ²

<i>Items of Expenditure</i>	<i>Amount in 1915 (Millions)</i>	<i>Percent-age of Total</i>	<i>Amount in 1922 (Millions)</i>	<i>Percent-age of Total</i>	<i>Amount in 1930 (Millions)</i>	<i>Percent-age of Total</i>
Education	\$146	29.6	\$ 329	25.7	\$ 558	24.4
Land and improvements	95	19.2	318	24.8	789	34.5
Charities, hospitals, and correction	89	18.0	162	12.7	224	9.8
Highways	22	4.4	106	8.2	251	10.9
Protection	26	5.3	52	4.1	79	3.4
Interest on debt	19	3.8	41	3.2	101	4.4
All other	97	19.7	272	21.3	288	12.6
Total	\$494	100	\$1,280	100	\$2,290	100

Local Expenditures. Counties, towns, and cities bear the major expense of government in the United States. This is illustrated by table 33, which gives only municipal expenditures.

Table 33 shows that municipal expenditures, like state expenditures, have been chiefly for education and land and improvements. Unlike state and federal outlays, the city appropriations have changed very little from year to year as far as the percentages allowed for various purposes are concerned. However, all three types of expenses have increased greatly. For municipalities, the per capita expenditures in terms of 1912 dollars rose from \$32.72 in 1912 to \$39.98 in 1929.

Do We Want Government Expenditures to Increase? What has caused the rapid increase in government expenditures? The increase has not been due to increased corruption, for the administration of present-day governments is relatively free from dishonesty and extravagance as compared with the governments of a century ago, although of course, much is still to be attained before we secure really efficient government. The real reason for the increased cost, as the

² From the figures of the Census Bureau, contained in the article by Mr. Merz already cited.

TABLE 33

DISTRIBUTION OF MUNICIPAL EXPENDITURES, 1912-1929 ³

<i>Items of Expenditure</i>	<i>Amount in 1912 (Millions)</i>	<i>Percent-age of Total</i>	<i>Amount in 1922 (Millions)</i>	<i>Percent-age of Total</i>	<i>Amount in 1929 (Millions)</i>	<i>Percent-age of Total</i>
Land and im- provements	\$303	31.6	\$ 618	27.9	\$ 967	28.1
Schools	147	15.3	484	21.8	716	20.9
Protection	107	11.2	258	11.5	378	11.0
Highways	58	6.0	111	5.0	158	4.6
Health and sanitation	51	5.3	126	5.7	193	5.6
Public util- ities	39	4.1	107	4.8	167	4.9
Interest on debt	108	11.3	214	9.7	365	10.6
All others	116	15.2	305	13.6	491	14.3
Total	\$959	100	\$2,223	100	\$3,435	100

above tables clearly indicate, is that our governments render many more services than they did formerly. It may be that governments render certain services that might better be given by individuals or private concerns, but on the other hand some authorities think that governments might advantageously add to their services the operation of such enterprises as transportation or the mining of coal. The activities mentioned would necessarily raise the total of government expenditures, but the improvement in welfare to the citizens might be sufficiently great to justify the increase. Or an opposite result might occur. The problem is very complex, and at present government operation of such enterprises lies in the realm of controversy.

HOW PUBLIC FUNDS ARE RAISED

Need of Collecting Revenues. In order to secure funds our governments must have a regular and well-devised system of revenue. Do governments create money, or do they merely collect revenue from the individuals or the groups under their authority? Obviously the latter, when governments are well managed. They do create

³ *Ibid.*

money, it is true, but the penalties of creating more than their collections warrant are so certain and drastic that they cannot be continued long.

Income from Government Enterprise and Property. The revenues of government come first from publicly owned enterprises, such as the



Cattle grazing on the public domain. The Government gets scant income from the public domain. The public domain is rather a means whereby the Government increases the income of special groups when public policy so dictates. (Photo Charles J. Belden. Pitchfork, Wyoming.)

United States Post Office and the Panama Canal, which are conducted by the federal Government and which may or may not show a net gain at the end of any given year. There are numerous state and local industries of a similar nature, such as the New York State Barge Canal, the Los Angeles water system, and the New Orleans terminal grain elevators. Few of these, however, show a profit and they often show a loss. This means merely that governments may decide to finance their services by taxation rather than by direct charges. But any gain that may arise goes into the government treasury. The

income from government enterprises, however, is never large, and perhaps it ought not to be. Certainly the test of a public business is the service it renders rather than the profit it earns.

The federal Government is the owner of large areas of land, the so-called public domain, chiefly in the West. The public domain includes agricultural and grazing lands, vast amounts of timber, mineral deposits of various sorts, and water-power resources. On most of these no attempt is made to secure a profit. Such was the policy adopted toward that part of the domain which might in time become agricultural land; much of it was given away and the rest was sold cheaply to bring it quickly into use. Recently, in an endeavor to conserve its resources rather than to obtain a revenue from them, the Government has maintained a closer control over water-power sites and over such mineral deposits as coal and petroleum; it has also established the national forest-reserve system for the conservation of our remaining timber resources. But little revenue can be expected from any of the Government's properties or enterprises.

Fees and Special Assessments. Another source of income to most governments consists of certain fees and special assessments which they may levy. When the national Government grants a patent, for example, it gives the grantee a monopoly on that patent for a certain period of years and for this special benefit charges the inventor a fee. In order to protect the public health a city may find it necessary to regulate certain occupations, such as restaurants and bakeries, and accordingly usually charges a license fee to help cover the cost of regulation. Similar license fees are also collected from drivers and owners of automobiles, places of amusement, physicians, and druggists. Special assessments are a particular kind of fee imposed when one receives a special benefit from an improvement to property. The paving of a street or the laying of a sewer or a water

LICENSE BUSINESS GROWS.

It Has Become One of the State's Greatest Activities.

Special to The New York Times.

ALBANY, Feb. 22.—The business of licensing this and that, from auctioneering to forest preserve guiding, has become one of the greatest activities of the State, a summary from the office of Attorney General Hamilton Ward showed today. Mr. Ward has now caused the introduction of legislation to license stock brokers.

The State, according to the Attorney General, now issues more than 100 different forms of licenses. It also authorizes county, city, town and village governments to issue many others, notably to cover marriage, amusements and dogs.

Among those whom the State now licenses are dealers in certain food supplies, barbers, plumbers, hunters and fishermen. To own a ferret, to propagate fur-bearing animals and to trap minnows for bait require licenses from the Conservation Department.

Certificates authorizing practice in professions and business cover the fields of medicine, law, engineering and surveying, architecture, aircraft operating, public accounting, and the maintenance of employment or ticket agencies, among many other things.

Licenses are a source of considerable revenue. However they are used primarily to regulate certain businesses in the public interest, rather than to raise funds. (From *The N. Y. Times*, February 23, 1930.)

Licenses are a source of considerable revenue. However they are used primarily to regulate certain businesses in the public interest, rather than to raise funds. (From *The N. Y. Times*, February 23, 1930.)

The Comptroller of the State of New York

will sell at his office at Albany, New York,
October 24, 1933 at 12 o'clock noon

\$29,500,000.00

Serial Bonds of the

State of New York

Dated October 15, 1933, and maturing as follows:

\$20,000,000.00 — 1934 to 1958

9,500,000.00 — 1934 to 1983

Principal and semi-annual interest April 15th and October 15th payable in lawful money of the United States of America at the Bank of the Manhattan Company, 40 Wall Street, New York City.

Exempt from all Federal and New York State Income Taxes

\$10,000,000.00—Emergency Construction Bonds—maturing \$400,000 annually October 15, 1934 to 1958, inclusive.

\$10,000,000.00—General State Improvement Bonds—maturing \$400,000 annually October 15, 1934 to 1958, inclusive.

\$9,500,000.00—Elimination of Grade Crossings Bonds—maturing \$190,000 annually October 15, 1934 to 1983, inclusive.

One method by which governments obtain funds for carrying on their many activities: an issue of New York State bonds advertised for sale. (From an advertisement in *The New York Times*, October 18, 1933.)

main benefits the entire city, but it confers a more direct benefit by increasing property values along the improved street; in consequence, the city levies a special assessment upon the owners of the property thus affected.

In addition to such revenues governments may also borrow funds, generally by selling bonds, to meet unusual expenses, such as the cost of war. The federal Government could hardly meet such an expense out of ordinary revenues. State and local governments also borrow frequently in order

to obtain money to build bridges, construct water-supply systems, or make other improvements.

Taxes and General Principles of Taxation. But by far the largest source of government revenue are taxes, collected from incomes, or on real and personal property, and on gasoline. Certain fundamental principles, first stated by Adam Smith, govern the imposition of taxes and are widely accepted:

1. The subjects of every state ought to contribute to the support of the government as nearly as possible in proportion to their respective abilities.
2. The tax which each individual is required to pay ought to be certain and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, ought to be definite and plain to the contributor and to every other person.
3. Every tax ought to be levied at the time, and in the manner, in which it is most likely to be convenient for the contributor to pay it.
4. Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what the tax brings into the public treasury.

These principles may be summarized by the four words *ability, certainty, convenience, and economy*.

How Much Taxes Should One Have to Pay? Although intelligent people generally accept the foregoing principles, the method of applying them and of actually determining the amount each citizen should be taxed has caused endless controversy. Should an individual contribute in accordance with the expense or cost which the Government incurs in his behalf? Or should his tax be levied on the basis of the benefits he receives from the Government? Or should he be taxed according to his ability to pay?

It is apparent that large numbers of people cannot contribute according to the benefits they receive from government. Moreover, both measuring of benefits and proportioning the costs of the benefits would be hard tasks. Cost and benefit, therefore, are not practical methods of establishing a basis for taxation. The modern tendency is to impose a tax according to ability to pay. Thus the man who has an annual income of \$20,000 pays more than the man who has an income of \$2,000. In practice, the tax on income is usually graduated upward not proportionally but progressively, because the ability to pay taxes is believed to increase at a faster rate than income or wealth. In short, a man with a large income can afford to surrender a larger part of it than a man with a smaller income who needs most of it for the necessities of life.

Taxation based upon ability to pay, as previously pointed out, is one of the chief means of redistributing the national income.

Types of Taxes. Many different forms of taxes are used by modern governments, the most important of which are (1) the property tax, (2) the income tax, (3) the inheritance tax, (4) certain business taxes, (5) the poll tax, (6) excises, and (7) customs. Of these the income tax and the property tax are the most important sources of revenue.

Income Tax. The federal income tax is a progressive tax imposed upon all who receive income from within the United States.⁴ It is levied upon both personal and corporate incomes. Since it is a direct tax, it cannot be easily shifted from one individual to another. It consists of two parts: (a) the normal tax and (b) the surtax. The normal tax under the 1932 law, for example, was 4 per cent on the

⁴ Certain states, for example New York, Massachusetts, and Wisconsin, also use the income tax.

first \$4,000 of net income, and 8 per cent on the balance of net income. The surtaxes⁵ apply only to incomes of \$6,000 and over. The surtax rates begin at 1 per cent and rise to 55 per cent on net incomes of \$1,000,000 and up. Viewed as a whole, the income tax measures up well to the four tests mentioned above.

General Property Tax. The general property tax is of great importance in the tax systems of state and local governments. These governments monopolize the general property tax, the national Government depending on other sources for its revenue. No two states have exactly the same system of levying the general property tax, but the general plan is much the same everywhere. The general property tax is supposed to be levied upon all property. It is usually administered by local governments in the following way:

1. Tax assessors make up lists of all persons residing in the district, giving the total value of each person's property.
2. The officers decide on the amount of income necessary for expenditures and a rate is then determined which will yield this amount; the rate is stated as so many mills per dollar.
3. The tax is paid to the local treasurer.

The defects of the general property tax have brought much criticism. First of all, it has become largely a tax on real estate because such property cannot be hidden or easily undervalued. This puts an unfair burden on real estate and other tangible property, while intangible property such as money, notes, bonds, and stocks manages to escape to a surprising degree. Since intangible property has come to be of great importance, especially in business enterprise, this defect is very serious.

Business Taxes. Among the various business taxes which are levied by the several states and by the federal Government are the following:

1. Corporation taxes, levied upon corporation earnings. This tax has replaced the property tax upon corporation property in many states.
2. Excises or internal taxes, levied on the sale or manufacture of certain commodities such as cigars, oleomargarine, and playing-cards.
3. Customs, levied upon commodities as they enter the country.

⁵ The surtaxes are added to the normal tax. For example, an income of \$15,000, would pay a normal tax on \$15,000 plus a surtax on the amount in excess of \$6,000.

4. In addition, certain general taxes are levied such as:
 - a. Inheritance taxes, levied upon estates before the estates can be transferred to heirs.
 - b. Consumption taxes, levied upon such commodities as gasoline and theater tickets.

Government Budgeting. Governments differ from most enterprises in that governments usually determine their expenses first and then raise revenue to meet them. A corporation, on the other hand, may estimate its expenses in advance, but it must keep within very definite

INCOME AND EXPENSE, 1933 AND 1934

Income \$2,624,000,000

INCOME TAX 33%	MISC. INTERNAL REV 35%	CUSTOMS 11%	ALL OTHERS 21%	<i>Beer Included with Misc. Internal Revenue</i>
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Expenditures \$3,770,000,000

PAYROLLS 29%	PUBLIC WORKS 13%	VETERANS 24%	ALL OTHERS 34%
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1933

Income \$2,200,000,000

INCOME TAX 36%	MISC. INTERNAL REV. 32%	CUSTOMS 12%	ALL OTHERS 13%	BEER 7%
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Expenditures \$2,320,000,000

PAYROLLS 43%	VETERANS 21%	ALL OTHERS 36%	<i>Public works not considered as part of ordinary budget</i>
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1934

The percentage figures upon which these charts are based are estimates—they are the estimates for the budget. (From *The United States Daily*, May 6, 1933.)

limits if it expects to continue long as a going concern. Good government also requires that a proper balance be maintained between expenditures and receipts. This is best brought about through the use of the budget.

The budget is an estimate of the expenses and income for an ensuing period so made that the two are equal or balance one another. The budget serves as a guide to those responsible for the financial policies of the Government and offers an added check upon unnecessary expenditures. Our national Government had no budget until 1921 and since that year has frequently been negligent in keeping within it. Cities have been even more wasteful of public funds.

Expanding Rôle of Government. The Government can, and in many ways does, contribute to higher levels of living. Certain services can be rendered more efficiently by government than by individuals or corporations. Moreover, private individuals and companies will not attempt to provide certain needed services, and accordingly they must be provided by public agencies. If we are to have such services, we must of course pay the cost. Few intelligent people doubt that the tendency to intrust more and more activities to government will continue to grow. We should recognize the advantages of the new trend and use our energy toward shaping a government which will contribute more uniformly and more justly to the common welfare.

SUMMARY

The activities of federal, state, and local governments affect our daily lives in innumerable ways. Even the traditional services which we have had so long that we scarcely notice them require public funds. In addition, modern governments expand their activities to render new services and to exercise social control. This expansion is reflected in the increasing government expenditures of all kinds.

Government expenditures must be financed almost entirely by taxation, which serves not only as a means of securing income for the Government, but also as an instrument for distributing the social income more equitably. With both ends in view, people generally believe that taxation should be levied on the basis of ability to pay.

What methods of taxation are best suited to make people pay according to their abilities? The income tax comes first, because it is hard to escape and difficult to shift to someone else. The property tax is still used extensively, but it is often unfair in its effect because it falls almost wholly on the owners of real estate, intangible property being easy to conceal. As government takes on more and more duties, services, and controls, we may expect corresponding increases in taxes.

QUESTIONS AND PROBLEMS

1. List the services you have received from government during the last twenty-four hours. Which served you most, the local, the state, or the national Government?
2. Make a bar graph (see page 423) showing the chief expenses of the national Government. Base the graph on Table 31 on page 415.

3. Contrast state and municipal expenditures with federal expenditures.
4. Do any of our governments render services that might better be given by private individuals or corporations? Mention any services now given by private persons or organizations that might preferably be rendered by one of our governments. In each instance give concrete examples. If you have no suggestion in either case, does that mean that you consider the present situation perfect? Explain.
5. What is meant by the use of public funds for *public* purposes? Give two examples of such use; one example of the reverse.
6. Name the chief sources from which the national Government secures its income. Which is the most important source?
7. Which of the sources of government income described on pages 192-94 are the following:
 - a. Mr. A pays the Secretary of State of Chicago, Illinois, a \$12 fee for license plates for his car. He also pays the city of Chicago a fee of \$10 for his car.
 - b. Mr. X dies leaving no heirs and no will; his estate of \$100,000 goes to the state of Ohio.
 - c. In 1851 Stephen A. Douglas was instrumental in securing for the Illinois Central Railroad land in Illinois still used by the company. An arrangement was then made by which the Illinois Central pays each year a certain proportion of its gross income to the state of Illinois.
 - d. Mr. Jones pays a certain amount of rent to the state of Utah for his small farm, which is owned by the state.
 - e. There are still a few toll bridges in several of the states at which small fees must be paid before travelers may use the bridges.
 - f. The city of Whiting, Indiana, charges each family an average of \$16 a year for the use of water.
 - g. Wisconsin requires all persons (except government employees) in the state whose incomes exceed \$12,000 to pay the state annually 7 per cent of the excess.
7. Where does the federal Government get its authority to levy taxes? Do people have any recourse against burdensome tax legislation, or are they helpless in such a situation?
8. Write out your definition of a tax. Are the payments described in the following statements taxes? Give reasons.
 - a. Mr. A, while traveling abroad, sends his nephew in the United States a rare toy manufactured in Germany. When the article arrives, the government officials state that a \$10 duty must be paid before the nephew can receive the toy.
 - b. For Mother's Day John, who is in California, sends his mother a wrist watch. In addition to paying the postage charges he pays 30 cents to insure the watch.

- c. The Boy Scout camp at Waverley Beach, Indiana, was within the limits of the Indiana State Park in the dunes, as planned by the state authorities. The owners of the camp refused to sell, whereupon the state seized the property, giving compensation for it.
- d. Mr. Harris bought a clock while touring in Europe. Upon his return to the United States he had to pay \$60 to the customs officer at New York City before he could bring the clock into the country.
9. Explain the fundamental principles that should govern taxation, as set forth by Adam Smith. Which of the various taxes levied by the federal Government is most in harmony with Smith's principles? Which is least in harmony with them? Give evidence that supports your conclusions.
10. Explain the *benefit theory* of taxation. Point out the chief weakness of this theory.
11. What is the *ability theory* of taxation? Explain the main difficulties in applying the ability theory.
12. What is the *general property tax*? Describe, step by step, the way in which it is usually administered. By which of our governments is it chiefly used? Explain its main defects.
13. What is a *sales tax*? Criticize it from the viewpoint of the principles of taxation laid down by Adam Smith.
14. In applying the four principles of just taxation we meet such problems as the following: exemption and progression in the income tax; logrolling and pork-barrel methods in the making of appropriations; personal and party graft in levying local taxes and expending local funds. Prepare to explain each of the items mentioned.
15. In a paragraph explain how the income tax may be a *means of redistributing wealth* as well as a source of revenue. Is such use of the income tax justifiable? Explain.
16. Tell how governments differ from private corporations in planning their finances. Mention dangers that grow out of this difference.
17. Work out the following problems. If you are unable to do so, consult the references given under Readings in the Class Library.
 - a. The general property tax is an important source of income in most of the states. This tax is usually laid upon both *real* and *personal* property. State to which type of property each of these items belongs: a vacant lot, a grand piano, a summer cottage, a necklace of diamonds, a car, a farm, a radio, bonds.
 - b. The total expenses of the state of Illinois for the year 1931 were \$130,052,000. How were the appropriations to cover these expenses made? Discuss this problem in relation to the general property tax, explaining the following points:
 1. Determination of appropriations

2. Apportionment of taxes
3. Assessment of taxes
4. Determination of the tax rate
5. Collection of taxes
- c. Mrs. Virginia Garland bequeathed her \$80,000 estate to charity, with the exception of \$500 which she left to her sister Mrs. Kate Gleason. Will Mrs. Gleason have to pay an inheritance tax? Will the charitable organizations (St. Luke's Hospital and the Home for the Friendless) receiving the bulk of the estate have to pay inheritance taxes? Explain.
18. Explain the nature and advantages of a government budget. Find out how the national budget is prepared. What part does Congress have in determining the budget?
19. Outline reforms that are needed in taxation and suggest ways by which the reforms might be brought about.
20. What is a *direct tax*? an *indirect tax*? Tabulate in two columns the following, showing whether they are direct or indirect taxes: marriage license, income tax, dog license, general property tax, inheritance tax, hunting and fishing license, automobile license, gasoline tax, teacher's certificate, engineer's license, document tax, doctor's license.
21. Marshall Field and Company buy woolen cloth in England for \$1 a yard. The tariff on the cloth amounts to .50 cents a yard, and the cost of transportation and insurance to 0.5 cents a yard. Allowing a profit of 15 cents a yard, what is the lowest price at which Field's can afford to sell the cloth? Who pays the tariff?
22. Bring to class newspaper clippings or cartoons that illustrate any of the following items: services rendered by government; the cost of government; principles of taxation; methods of taxation; proposed tax reforms.
23. *Report for volunteers:*
 - a. Our state budget and its main items
 - b. The finances of our local government
 - c. Our present federal budget
 - d. The single tax
 - e. How our schools are supported

READINGS IN THE CLASS LIBRARY

1. "Taxation," Clay, *Economics*, pp. 365-69.
2. "Receipts from Public Revenues," Patterson and Scholz, *Economic Problems of Modern Life*, pp. 390-403.
3. "Federal Tax Revenues," *ibid.*, pp. 405-21.
4. "State and Local Taxation," *ibid.*, pp. 423-39.
5. "Jones et al. v. City of Portland," Weld and Tostlebe, *A Case Book for Economics*, pp. 460-64.

6. "Expenditures of Federal, State, and City Governments," H. L. Lutz, *ibid.*, pp. 466-69.
7. "Taxation," *ibid.*, pp. 470-88.
8. "Our Postal System," H. S. New, Hill, *Readings in Vocational Life*, pp. 154-58.

Part Six

RAISING THE LEVELS OF LIVING BY THE WISE USE OF INCOME

Looking Backward—and Forward

AFTER discussing the problem of levels of living in Part One, and describing levels of living in America in Part Two, we turned, in Part Three, to a consideration of means of improving American economic life, and there discussed the important part that productive techniques must play. In Part Four we examined the effect that the organization of economic affairs has upon levels

LOOKING BACKWARD—AND FORWARD

of living. Here we found (1) that the technical side of management must be as efficient as possible, and (2) that income must be distributed wisely. In considering the latter topic we found that the present distribution not only fails to coördinate production and consumption, but also fails to balance the interests of the various groups in the economic world, for example the farmer and the business man. The central problem in raising levels of living thus becomes a problem of distributing income wisely. In Part Five, which we have just completed, we studied the means by which income is distributed in the United States. Our findings may be summarized as follows:

1. It is not helpful to discuss the distribution of income in terms of *rights*; every proposal must be tested in terms of its *consequences*.

2. Income is distributed by means of price transactions in the market. When such transactions are examined, we find that certain groups are favored by law, by custom, or by superior economic position. A favorable position is not always possessed by groups in proportion to the part of the national income they should get to insure maximum national well-being. This means that the strength of various groups must be modified.

3. Government is the most important agency for redistributing income. It does this indirectly by strengthening weak bargainers and directly by taxation, public services, and social legislation.

4. Finally, the expanding services of government have increased the amounts and the range of governmental expenditures and the sources of government income.

Having considered the distribution of income, we are now in a position to consider the wise use of income as another method of raising levels of living.

Chapter 23

WHY PEOPLE BUY WHAT THEY BUY

THE PROBLEM OF MAKING CHOICES IN BUYING GOODS

Individual and Social Importance of Proper Choices. Of what value is the power to make purchases if the power is used foolishly? Examples of the foolish use of income are unfortunately all too numerous. There are the vulgar extravagances of the rich, of course, but there are also departures by most of us from common-sense rules in buying. And the purchases we make are vitally important, for often the way a family uses its income makes all the difference between poverty and comfort.

And every unwise purchase affects not only the individual and his family group, but also the welfare of all who live in the community. Spending directs the efforts of producers, and determines whether effort shall go to making *illth*, as Ruskin calls it, or to making *wealth*. Only through wise choosing and spending can the vast possibilities of our marvelous productive agencies bring about real human progress.

Recent Appearance of Problems of Choice. The problem of choice in the spending of income is very recent in the history of the world, that is, recent for the mass of people. In medieval times, to go back no further, the alternatives in making purchases were very few. The medieval workman was limited in his choices to a very small number of kinds of food, of drink, of clothing, of furnishings for his house, of toys for his children, of amusements for his scant leisure, of ways of taking a journey. The productive system of the time was so limited that most buyers found few things to choose from. Moreover, money had not yet become a universal medium of exchange;

workmen were paid in kind—that is, in commodities—and they usually depended on barter to obtain the other goods that they desired.

But when the practice of paying workmen in money developed, they became free to use their wages to buy whatever they wished. The practice of money payment was part of the Industrial Revolution, which, you will remember, so increased the amounts and kinds of goods that a greater freedom of choice became widespread.

Failure to Educate Buyers. Unfortunately, while the multiplication of goods presents a need for greater wisdom in selection, few people have become more wise. This explains the great contrasts found in the ways of life among families who have the same incomes. One family spends an excessive amount for amuse-

ment, for fine clothes and adornment, and for an unwise diet; another family dresses plainly, buys food for a healthy and balanced diet rather than for momentary satisfaction, and keeps its premises neat and its house spotless. Ofttimes the better family of the two—and can there be any doubt which of the two is the better family for the community?—has even a lower money income than the worse family.

Difficulty of Setting Standards of Choice. The main difficulties in the use of income arise when specific judgments must be made about purchases, for there are no scientific rules for choosing and using

Speculate
NOW!
in the big
QUEBEC
COPPER-GOLD RUSH
(The Boom Is In Full Blast Now)
All You Can Speculate is
Speculate To-Day Profit To-morrow **\$25** *It may Mean Fortune*

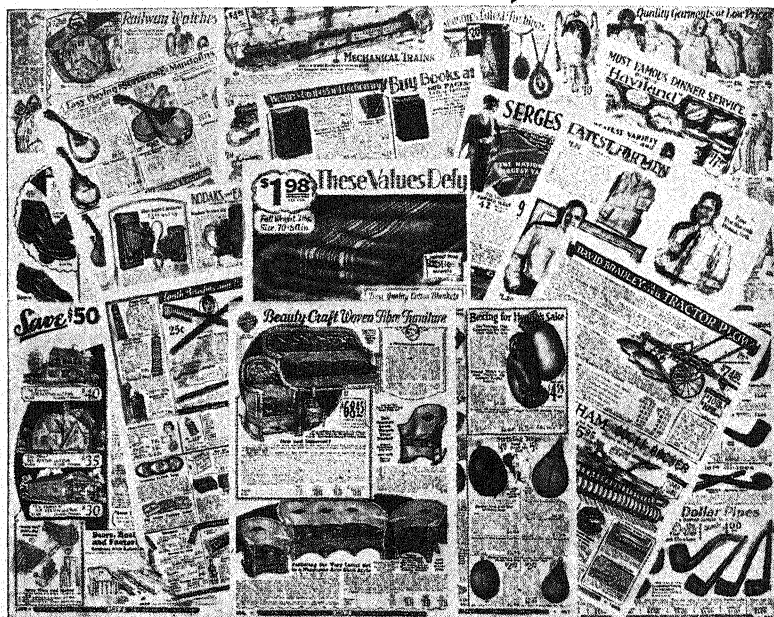
goods. Sometimes, it is true, the rules are fairly simple. For example, the members of Family A are all musical, with children of genuine promise in the profession or the art; a piano for the family is undoubtedly a desirable purchase. But the members of Family B are the reverse, even though the two daughters think they are musical;



Even as recently as the turn of the century, the peddlers wagon, with its slim variety of articles, was the temptation of the housewife. Contrast this with the 46,000 choices in the *Sears, Roebuck Catalogue*, the household guide of today. (From *Harper's Weekly*, June 20, 1868. Used by permission.)

under such circumstances a piano for Family B might be an extravagance. However, a thousand illustrations might be given concerning choices of food, of clothing, and of other articles in which no rule can be laid down, and in which no judgment can be trusted except that of the individual or the family concerned. A general restriction against the eating of lobsters, the using of perfumes, the reading of novels, the playing of violins, the wearing of silk hosiery, or sleeping on hair mattresses might be desirable for certain families, but might work considerable hardship on others. Each person ought to know which purchases are wasteful and which are wise for himself or herself, and be willing to allow wide variations for others.

Basic Principles of Choice. Certain common-sense rules concerning choices can be made clear, however, so that wide differences in judgment can be seen to be right on one side and wrong on the other. Effort should be given first of all to analyze the choosing,



When one picks an article from this amazing display, is it a choice or a chance? (Sheets from *Sears, Roebuck Catalogue*, 1928. Used by permission.)

spending, and using activities of individuals and groups in order to find out what may be expected in the way of thoughtful choice, and what rules and devices there are for guidance in making purchases. *To make choices as thoughtfully as possible is to make them as wisely as one can.* And to improve choices is to raise the levels of living.

HOW CHOICES ARE MADE

Habit as an Aid to Choice. Most choices are made by habit. This is very fortunate, for none of us could find the time or the energy to think through every choice we are forced to make. Habit is a

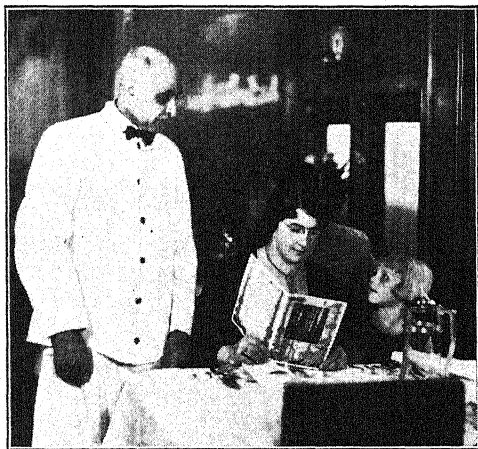
short cut which enables us to escape reflection and decision. Habit carries its own dangers, because habitual choices often fail to give full satisfaction; yet in spite of this defect habit is a valuable servant.

Feeling of a Lack the First Step. The first step in an individual's act of choice is his feeling of a lack, such as a lack of food. We call this feeling hunger. But the feeling may be a hunger for a *certain kind* of food, the want being suggested by an advertisement. Or he may feel a lack of what is considered proper apparel. Or he may feel the lack of health, the lack of a home place, the lack of amusement, or the lack of anything, in fact, which makes life seem to him complete. There is literally no limit to the number of such lacks and no end to the effort it would take to fill them all.

Reflection the Second Step in Choosing. The step which immediately follows the felt lack is the casting about to find relief. It is here that reflection enters the process, defining the elements of the problem and possible ways for its solution. Consider, for example, what we call hunger. Even this want, if it is to find satisfaction, must be carefully directed. Do we wish a full meal or a light one; will a sandwich and a glass of milk do? Is it morning hunger, or night hunger with its different bodily demands? Where shall we seek food? Shall we spend much or little for it? All such matters and many more enter into our deliberation.

Aids in the Reflective Stage. Sometimes we may be able to settle some of these reflections quickly. We may know that we have only 40

cents to spend; we may know that our luncheon must be light; we may know that we are doing sedentary work and should not load the meal with proteins. Habit also plays its part. The customary



The Pullman menu presents a real problem of choice, sufficient to cause delays that are irksome to hungry children with less capricious tastes.

lunch time comes, we go to some regularly frequented place and eat a meal similar to those we eat every day. We may be thinking of other things—conversing even—all the time. However, the place need not always be determined, but the food to be eaten must be; or the food—say a bowl of bread and milk—is regular practice, but the place in which to eat it must be selected. Choice, therefore, often becomes extremely complex when hunger besets the modern individual. He has decisions to make which were necessary to few of his ancestors, who had only black bread and greasy soup in any case, and who did not need therefore to bother their heads about choosing. And if the making of choices is so complex in meeting so simple a need as hunger, how much more complex are the choices involved in the more highly complicated needs of clothing, of amusement, of creative work, of adornment, and all the rest!

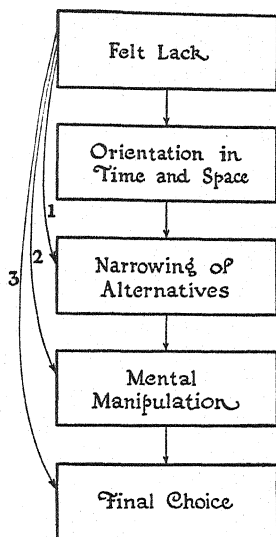
Narrowing Alternatives the Third Step in Choosing. The third step in making a choice is a narrowing of the alternatives that an individual faces. The meal must be light; well, there are many menus falling within the requirements. Here specific suggestions such as the advice of friends or advertisements play a large part, bringing concrete proposals to the mind. These are sorted over, some are easily discarded as not meeting the conditions, and some survive for the next step in making a choice.

Habit of course may enter at any point and may short-cut the choosing process. For instance, vegetable salad appears upon the menu. It has been eaten on similar occasions with great satisfaction and with no distressing results. It complies with all the general tests; it makes a light meal, it contains vitamins and a large proportion of nonprotein food. All this is perfectly clear and familiar. The shutter is clicked, the picture taken, the problem decided.

Mental Manipulation the Fourth Step. But when habit does not short-circuit the process a fourth step must be taken: mental manipulation, an imaginary trying-out process which compares the satisfaction to be secured from one meal with that to be derived from other possible meals. The details of this process are too familiar to need description. They vary, of course, with individuals and with the alternatives offered. The girl who hesitates between two equally desirable lovers is a favorite character in fiction; it may be partly because she typifies the almost constant state of the human mind hesitating over the choices it must make.

Shall dinner—to return to the simple illustration of food—if the decision has been made that it shall contain meat, center around roast beef or lamb, steak, a chop or corned beef? The menu offers all of them. Perhaps here again habit cuts off the necessity of choice. In some minds, *dinner*, *roast*, and *beef* are so associated that no choice is necessary. But if all of the alternatives on the menu appear desirable, endless possibilities open up! One might linger indefinitely after soup and before meat and never really settle the problem if the urge of emptiness did not compel one to do so.

Final Step. Then comes the final act of choice, which again is merely the further comparison of the prospective food tentatively settled upon with all possible alternatives, and the rejection of them in its favor. If one of the other foods should at this stage appear as a formidable rival, it is not too late to change one's choice, but it is difficult, for a change would require a comparison of the positive qualities of the new food and its possible defects as an ultimate satisfier. But this requires one to go back only a single stage, not three or four, and by no means involves a repetition of the whole process of choosing. At all events, the final act of choice is the rejection of all alternatives and the adoption of a single source of satisfaction.



The complete process of choice.

IS CHOICE REFLECTIVE OR UNREFLECTIVE?

Successful Choice Depends upon Reflection. The act of choosing has behind it an urge for satisfaction, but generally the urge fails to indicate the exact action required. This requirement, if well met, is found by a process of reasoning which weighs the consequences to be expected from the alternatives. The degrees of satisfaction which comes from the decision depends upon the quality of the reflection with which the decision was made.

Importance of Habitual Choices. Despite the wisdom of reflection, it is also sometimes wise to eliminate reflection. Once the mind has made a choice it is a tremendous economy to be able to escape from making that particular effort again. The mind is thus freed for other work. Carried to an extreme, we see this illustrated in the person who has completely routinized the small decisions of life. He does the same things, uses the same goods, day after day according to established habit. And such persons are often the ones who use their reasoning powers for the very highest purposes. A scientist, a philosopher, an artist, a great administrator, simply cannot afford to have to decide each day what he shall eat and wear, and what he shall do for exercise or amusement.

Importance of Freedom from Habit in Many Choices. What would be the situation of a person whose choices once made became fixed habits, not subject to revision from that time on? Probably a time would come in a world which changes as rapidly as the modern world when the choices of such an individual would have to cease



If the customs of our ancestors had persisted in the face of modern travel.

because all the things for which he had formed habits had disappeared from general use. The old gentleman seen recently in a men's furnishing store trying to buy an old-fashioned stock for which he had contracted a fondness in his youth illustrates this fact. Reason had lost its power to revise habit, and under such circumstances we can imagine the old gentleman wandering from store to store in a vain search for the vanished article.

It is not a serious matter that an old gentleman should go about hunting for a vanished stock; but it would be a serious matter if the habits of most people should become unchangeable. For example, if the habit of eating large quantities of meat and drinking much liquor, which belonged to an age of heavy manual labor and outdoor living, persisted today, we should all die of the habit prematurely. Or if the habits of an older genera-

tion in the wearing of clothing had not been revised and we had never adopted athletic underwear, or sweaters, or soft collars, or felt hats, life would be much less comfortable.

Changes do occur and occur frequently. The reason for the adoption of a new mode is that we possess the power to break up and revise old habits. Certain habits are easily revised; others are revised only with great difficulty. Americans substitute corn for wheat in their diets with extreme reluctance, but they adopted athletic underwear almost overnight. Individuals differ, too, and they differ concerning the ease with which they change different habits. The progress of society depends in large part upon the willingness of individuals and groups to give up antiquated habits and customs and adopt new and better ones.

Balance between Reflection and Habit. Two important conclusions concerning the weight to be given habit and reflection in making choices may be drawn: (1) It is desirable and economical that the smaller choices of life should become habitual, and (2) it is necessary that habits should sometimes be revised. The two conclusions appear at first contradictory, but society always strikes a balance. It permits certain individuals (inventors, salesmen, advertisers, et cetera) to concentrate upon each small matter. They make suggestions to the rest of us for changes in that regard. As a result we achieve safety razors, typewriters, soda crackers, and automobiles. Such things are gradually forced upon our attention, and most of us, however busy with other affairs and however attached to old goods, come eventually to admit them to our minds. Finally we make a complete new choice—act in a field where before habit had ruled. When this has been accomplished, a period of awkwardness with the safety razor or the typewriter follows: then habit is gradually formed, the whole matter recedes from consciousness, and we go on as though we had always used the new article.

SUMMARY

After a sufficient income has been attained, the problem of using it wisely still remains. Wise use of income affects not only the individual, but also influences all society by directing the course of productive effort. The great variety of goods in modern times has not been accompanied by a corresponding improvement in power

to make wise choices. Although it is true that arbitrary standards of choice are impossible, broad principles can be enunciated. These principles rest upon an analysis of the process by which choices are made. The chief steps in choosing are: (1) feeling a lack, (2) reflection, (3) narrowing alternatives, (4) mental manipulation, (5) final decision. The chief elements in the process are the use of habit and the use of reflection. Wisdom consists in letting the force of habit eliminate the need for thought about simple routine matters without blocking reflection as an aid to a progressive change in habits.

QUESTIONS AND PROBLEMS

1. What did Ruskin mean by *illth*? Tell how the word relates to this chapter.
2. Explain and illustrate this statement: "The problem of choice in spending the income is very recent in the history of the world."
3. Point out ways in which the problem of spending is as important as the problem of income. Is it possible to determine which of the two is the more important? Give reasons.
4. Explain the relation of habit to choice. Give examples of choices you make by habit rather than by reflection. In such instances is habit a servant or a master? Why?
5. Describe in order the steps usually involved in making deliberate choices. Illustrate by a purchase you made during the past week.
6. In what dilemma would a person find himself if all of his choices were to become fixed habits? In what dilemma would he be if all of his choices had to be made through the process referred to in No. 5? Answer the same questions after substituting the word *society* for the word *person*.
7. Propose conclusions concerning the making of choices you feel you can defend. Propose only such conclusions as in your judgment are applicable to all the members of the class.

READINGS IN THE CLASS LIBRARY

1. "Student Expenditures," Weld and Tostlebe, *A Case Book for Economics*, pp. 3-8.
2. "Lessons from Forty Years Study of the Cost of Living," A. H. Ulm, *ibid.*, pp. 15-22.
3. "Utility and Value," Clay, *Economics*, pp. 266-71.
4. "Wealth and Welfare," *ibid.*, pp. 389-95.
5. "Extravagance and Waste," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 834-38.
6. "The Woman and Her Raiment," I. M. Tarbell, Center, *The Worker and His Work*, pp. 270-76.
7. "Why Save?" by Angelo Patri, Hill, *Readings in Vocational Life*, pp. 49-50.

Chapter 24

BETTER METHODS OF CHOOSING WHAT TO BUY

HOW FAMILY CHOICES MAY BE IMPROVED

Family Budget. One device of recent years which helps to improve family choices is the budget. This requires careful planning of proposed expenditures in relation to income so that the two will balance. The use of a budget gives due weight to the various purchases contemplated. It also helps to check wasteful spending in favor of purchases that will give solid satisfaction.

The given quantity in any budget is the expected income. To this must be fitted the expenditures which can be made. First will come such necessities as food, clothing, and shelter—that is, a decision will have to be made concerning the amounts of the income which are to be set aside for such purposes. In food the assistance of experts is possible, for dietitians have discovered the necessary elements of a proper diet and have reduced the whole to calories and to chemical content. Such calculations are numerous and are widely circulated in newspapers, magazines, and books; they form at least a minimum basis for the food budget. Similarly, the shelter item can be reduced to the necessary cubic feet of air space per person, but this is a minimum and does not include what is desirable for air and sunlight.

For wise personal living under a budget three practices are essential:

1. Keep a record of all expenditures.
2. Classify expenditures at regular intervals—once a week, or once a month—and enter under the proper budget headings, for analysis and comparison.

3. Use the budget classifications as a *control*; that is, not only see that total expenditures remain within total income, but also see that expenditures do not exceed the limits in any classification, or if they must under one heading, that reductions under another are made to compensate.¹

For most people and most families a budget is merely an excellent device for enabling them to keep constantly and vividly in mind the main principle of wise spending: "If I buy *this*, I cannot buy *that*, since my income has definite limits." In short, each choice should be made with a full realization of its effects on the budget.

Changes in the family and family needs require changes in the budget. New members are added; others drop out; the income is raised or lowered; the ages—and consequently the needs—of the members change. Budgets ought to be revised therefore as frequently as changes affect them.

Increasing the Efficiency of Family Expenditures. Another way in which family expenditures may be made more efficient is through insurance. A considerable—and growing—proportion of income goes into funds which protect the home against the various risks of life: ill health, accident, unemployment, old age, and death. Another part of the family income goes into the facilities of life provided by communal expenditures. Education is one of these; much recreational expense is also borne by our governments—national, state, and municipal park systems. Health, too, is rapidly becoming of public concern so that free clinics and even nursing services are often provided. None of the services named could be had through independent family expenditure at anything like the low cost at which they are now provided by the community.

HOW BUSINESS CHOICES MAY BE IMPROVED

Intermediate Consumption of Goods by Industries. The uses of goods by industries are not final uses in the sense that is meant when we say that an individual has consumed something. Business concerns use goods to make more goods; they multiply the total want-satisfying power, the utility, of the materials passing through their hands.

¹A book giving simple and practical directions on the subject is *Budgeting Your Income* by Isabel Ely Lord, Harcourt, Brace and Company.

Such use might be called *intermediate consumption* to distinguish it from the uses to which goods are put in final consumption.

Most articles require several intermediate consumptions before they are ready for final consumption. The blast furnace uses up coal, limestone, and iron ore, but it makes pig-iron. The pig-iron in turn is consumed by other factories which destroy its character as pig-iron, but make of it something else. In combination with other materials it may find a final use as the wheels of a freight car, as the beams of a building, as a sewer pipe, or as a pair of roller skates. It may contribute only to the finishing of a commodity which seemingly has no relation to the iron mine; for example, it may go into machinery for cutting or sewing clothing, for pressing paper, or for making furniture.

Industries, like individuals, vary in wisdom. Some make foolish choices; some make wise ones. Some spend rashly; some shrewdly. Some use the goods which come to them wastefully; some use materials efficiently. And since the total product of such choices and spendings and uses is the income of society, we are all affected by the efficiency of the whole process.

Business Choices as Problems of Forecasting and Coördination. For the most part the losses or wastes that occur in business are failures of planning—of the larger planning that sees the enterprise in relation to other enterprises, the whole making an industry. At some time there may even be an extension of planning that will include the relations of industries to each other, but achievement of this goal apparently lies in a distant future.

An example of the short-sightedness of business is provided by the failure of most American businesses to foresee and prepare for the depression of 1929. Many concerns found themselves "over extended"; they had bought large stocks of goods at prices far higher than those at which the goods could be sold.

A similar situation arises whenever depression recurs; and, as has been pointed out, depressions recur with cyclical regularity. Apparently the social loss and inefficiency which come from short-sightedness can be avoided only by close coöperation among businesses, with some social direction for the whole process. This is the basis for the idea of social planning and management which is so prominent now.²

Once the business world accepts social planning, the first step is to gather statistical information concerning the phases of industrial

² See George Soule, *A Planned Society*, Macmillan, 1932.

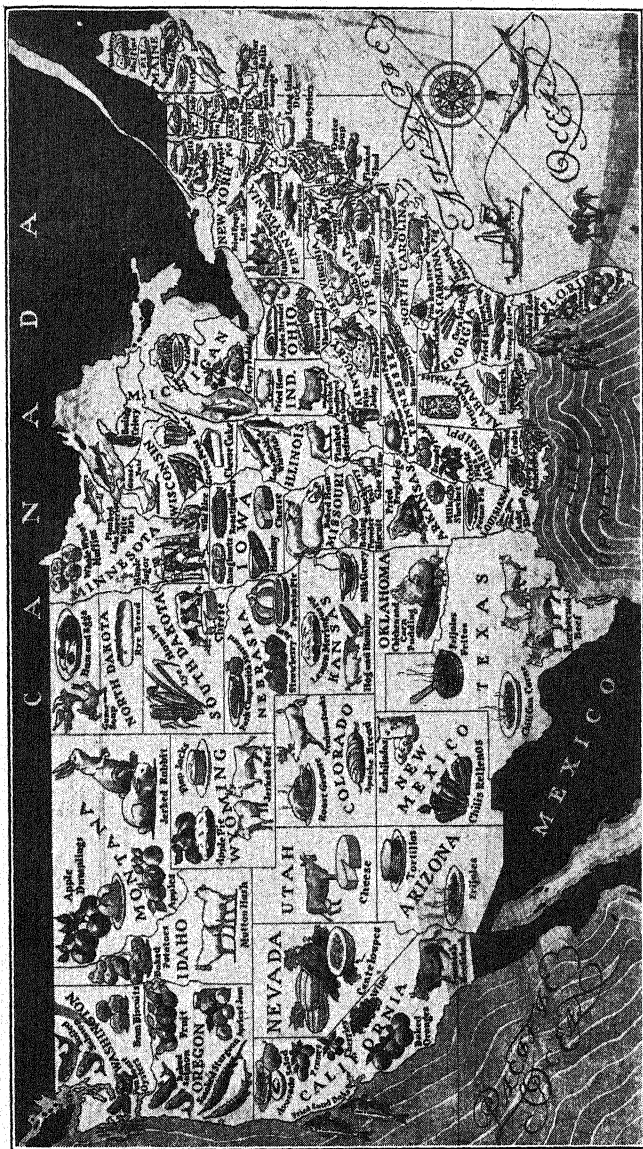
activity that affect more than one business. Such information ought to assist materially in forecasting future industrial events and thereby help business concerns prepare for them before they occur.

IMPROVING REGIONAL AND NATIONAL USES

Difficulty of Explaining Regional Choices. By study and experimentation we may in time understand so well why individuals make particular choices that we shall be able to predict what in given circumstances a certain individual will do. We may even come to understand such a group as the family. But when we ask why brown eggs command a premium in Boston and why white eggs are preferred in New York we face such a complicated situation that explanation seems impossible.

To understand the reasons for regional preferences we usually fall back upon some economic fact which seems to determine the choice, but there is usually so vast a gap between the fact and the choice that the explanations are frequently challenged. We cannot certainly say *why* cornbread is not eaten much in New England nor *why* dogfish is consistently refused in New York markets. We seem to be on safer ground when we cite the cheapness of the most widely used foodstuffs and the expensiveness of the less used ones. But even this explanation cannot be accepted with certainty. When we are told that the "royal purple" of ancient times was only the common cotton cloth of today, we wonder why we value cotton cloth so little and prefer silk and wool instead. Is it because wool is more suited to our winters? But we use wool in summer too. And silk is worn all winter now by most city women who can possibly afford it. And silk costs more than cotton! Few ready explanations of regional choices stand up under sharp analysis.

Economic Wisdom of Proper Regional Choices. We shall have to avoid, then, the attempt to explain *why* snails are eaten in France and *why* Frenchmen have no proper conception of pumpkin pie or ham and eggs. But from the economic point of view we can say that certain habits would be more desirable than those now in use, that they would be a slighter drain upon our soil and our energy, and that as we move in their direction the standards of life are raised for everyone. What, for example, could be more rational than that the Pilgrims should have feasted at Thanksgiving upon wild turkey? And if we are to eat turkey at all, surely autumn is the season. This is a



Every section of our bountiful country is famous for some particular delicacy. Frequently these local preferences can be explained on the ground of climate or soil. Just as frequently the liking seems entirely accidental. (From *The N. Y. Times*, June 4, 1933.)

comparatively trivial illustration, but others are much more important. For example, Professor Carver cites the bean and the codfish cake:

The prosperity of this country is due in some small measure at least to the wise food habits that were developed under pioneer conditions. It would have been easy, perhaps natural, for those pioneers to have insisted on the kinds of food to which they had been accustomed in their European home. If they had cherished those prejudices they would have found them expensive luxuries in their new home. Instead of cherishing such prejudices they developed new food habits more in keeping with the new conditions. They managed to find ample nourishment and pleasure in foods that could be economically grown. Pork and beans furnish an excellent illustration. Here is a highly nutritious combination and reasonably well balanced. Though not quite so easily digestible as some others, and perhaps not well suited to the needs of indoor people, it served admirably for outdoor workers such as cattlemen, lumbermen, and farmers. At the same time it was economical. Hogs ran wild in the woods and found their own living. They were highly prolific and multiplied rapidly. Beans were easily grown and required no expensive milling or processing to prepare them for food. Besides, being legumes, they tended to replace rather than to exhaust the nitrogen of the soil. The housewives who mastered the art of making this highly nutritious and economical combination into a delectable dish were important factors in laying the foundation for the present prosperity of our country. Codfish balls furnish another illustration. This combination of codfish, which the ocean furnished in apparently inexhaustible quantities, potatoes which could be grown in every garden, and pork fat, a by-product of hog raising, was a well balanced and nutritious combination made agreeable by the housewives' art. Time would fail us to speak of pumpkin pies, green corn, succotash, hasty pudding and a multitude of other delicious compounds that delighted as well as nourished our ancestors at low cost in human labor. Mention must be made, however, of Johnny cake, one of America's chief contributions to the happiness of mankind, made of the meal of an indigenous cereal, the largest crop now grown here, and the most magnificent corn grown anywhere in the world. Even the despised buckwheat, grown on many soils as a catch crop, but grown mainly on soils too poor and cold for anything else, has yielded to the art of our cooks and given us buckwheat cakes.³

Equally important is the fact that wheat seems to us desirable as the main cereal item of our diet and that wheat is the food plant which is best adapted to the semiarid lands just east of the Rockies. Our

³ T. N. Carver, *The Economy of Human Energy* (Macmillan, 1924), pp. 43-44. Quoted by permission of the publishers.

refusal to eat corn in as direct a form as we eat wheat is not so rational. We feed corn to animals and lose much of its efficiency.

Meat as a Rational Choice. For Americans a rational amount in the diet of meat is economically wise, because, of all good converters, the hog is most efficient—unless we consider milk. The cow is really our most efficient animal. She is capable of converting roughage—hay, oil cake, and the like—into human food. And when she has given milk for years there is still her flesh to be eaten. But for converting grain into meat the humble hog is most efficient.

Our Neglect of Cereal Foods. However efficient the hog and the cow may be, we lose much by not eating most of the cereals ourselves, although meat sometimes comes to us almost free, as when cattle live on the nontillable lands of the Western ranges or sheep crop the stony hill pastures of New England.

The moment plow land is seeded down to pasture, that moment is its producing power vastly diminished—reduction number one. Again all animal foods are from six to thirty-six times as expensive in food values as are the grains from which they are made—reduction number two. That is to say that to feed grain to an animal and then eat the animal is to sacrifice quantity to appetite and to diminish physiological welfare at a ratio of twenty or thirty to one. Animal foods we must have to be well; but, except for pork, they can be produced when necessary from field crops that we ourselves cannot consume and yet are necessary to good farming—clover and alfalfa, for example.⁴

The relative efficiency of animals in converting vegetable matter into meat may be seen from the following table:

TABLE 34

HUMAN FOOD PRODUCED FROM 100 POUNDS OF DIGESTIBLE MATTER CONSUMED ⁵

<i>Animal</i>	<i>Edible Solids, Lbs.</i>	<i>Animal</i>	<i>Edible Solids, Lbs.</i>
Cow (milk)	18.0	Poultry (eggs)	5.1
Pig (dressed)	15.6	Poultry (dressed)	4.2
Cow (dressed)	9.4	Lamb (dressed)	3.2
Calf (dressed)	8.1	Steer (dressed)	2.8
Cow (butter)	5.4	Sheep (dressed)	2.6

⁴ E. Davenport, "Wanted: a Program of Food Production," *Country Gentleman*, Vol. LXXXIII (Jan. 26, 1918), pp. 10–11.

⁵ W. H. Jordan, *The Feeding of Animals*, 1901.

The consuming habits of a nation ought to be guided by exact information. Yet the guidance of consumption is much more complex than it appears at first. Although milk is the most efficient food, and is necessary for children, it has no special properties which make it for normal adults the superfood implied in certain advertisements of milk-dealers and others interested in its sale. All foods are broken down in the digestive process, and the high cost of living has made the problem of the dietitian one of searching for the cheapest energy-yielding foods. In comparison with cereals milk is a luxury to be indulged in only by the luxury-loving. Under present conditions it must be ranked among the more expensive foods, for the elements of nutrition can be obtained more cheaply from other sources.

TABLE 35

MILK COMPARED WITH GRAINS, CEREALS, AND VEGETABLES

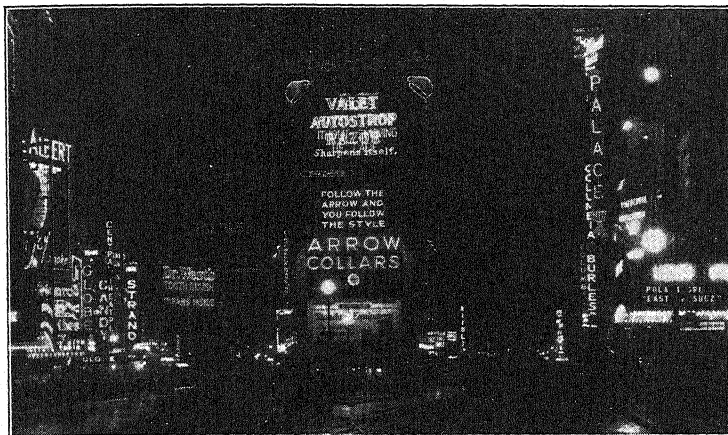
<i>Article</i>	<i>Weight</i>	<i>Protein Percentage</i>	<i>Fat Percentage</i>	<i>Calories</i>
Milk	1 lb.	3	3	300
Flour	1 lb.	10-11	..	1,500-1,600
Oatmeal	1 lb.	14-16	6	1,700
Bread	1 lb.	8-9	..	1,200
Rice	1 lb.	6-8	..	1,600
Macaroni	1 lb.	9-10	..	1,600
Sugar	1 lb.	..	..	1,850
Split peas	1 lb.	24	..	1,600
Peanuts	1 lb.	19	29	1,900
Raisins	1 lb.	3	3	1,400
Potatoes	1 lb.	1.5	..	350

Evidently a population seeking after cheapness in consumption for adults will treat milk only as a by-product, and will confine its diet largely to the more efficient foods. Yet it will not give up meat or even milk altogether, for both are sometimes produced nearly "free."

American Tendency toward More Costly Foods. It is interesting that the United States has increased its milk consumption in spite of its cost. But the most interesting dietary change in our country is probably the increase of other relatively high-priced foods such as fresh vegetables, which are important not because of richness in calories, but because they are an important source of vitamins (A, B,

and C) and because they furnish certain mineral salts and roughage essential to a rounded diet.

The greatest difficulty with the food supply of most of the poorer classes of the world is that even when the food contains sufficient nourishment, it is often of the wrong kind. Cereals, meats, and root vegetables are the basis; but such foods need to be supplemented by leafy and green vegetables. The American salad habit, for example,



Times Square, New York. The most costly and spectacular advertising in the world. Very few people know the difference between one collar and another. That is the very reason why, when a salesman asks your choice, you are very likely to mention the name emblazoned upon your memory by the electric lights. (Photo Ewing Galloway, N. Y.)

although costly, contributes enormously to physical well-being; and so does the wide use of fruits and sugar. That such costly items have been playing an increasingly prominent part in the American diet is partly a result of relative prosperity over a long period of time. In any prosperous country there seems to be a decrease in the use of cheap foods and an increase in the use of high-priced ones.

THE CHIEF OBSTACLES TO WISE CHOICES AND SOME REMEDIES

Problem Created by Advertising. The enormous expansion of American business during the present century has been accompanied by an equal development in the technique of salesmanship. Adver-

tising serves a worth-while purpose in so far as it educates people as to relative values. But advertising today is too often only an aspect of competitive profit-seeking. As such it presents two evils: (1) enormous waste involved in the effort to turn trade from one firm to another when their products are identical in value; and (2) fooling consumers rather than enlightening them by the advertising process.

Growth of Advertising. Between 1909 and 1929 the cost of periodical advertising rose from \$54,000,000 to \$320,000,000 and of

newspaper advertising from \$149,000,000 to \$792,000,000. If to such items we add vast sums for radio advertising, direct advertising, street-car advertising, et cetera, we get a total of \$1,782,000,000 for 1929—about 2 per cent of the national income.⁶

Advertising as Waste. Even if we assume that all the products advertised are worth while, a tremendous social waste is involved. Stuart Chase estimates that 600,000 people are engaged in advertising. He says that in a socially planned society 10 per cent of this number would be necessary to spread useful information and 540,000

might be released for other needed work. He presents the economics of advertising in this fashion:

There are just so many dollars to be spent. Advertising creates no new dollars. In fact, by removing workers from productive employment, it tends

⁶ *Recent Social Trends*, Vol. II, pp. 871-72.



One frequently wonders by what supernatural inspiration this fat little man becomes a creator of fashion. (© Life Publishing Co., 1930. Used by permission.)

to depress output, and thus even lessen the number of real dollars. What it does do is this. It *transfers* purchasing power from A to B. It makes people stop buying Mogg's soap and start buying Bogg's soap. Every drug store carries some 60 kinds of soap and 35 kinds of tooth paste. It makes people stop buying shaving soap in mugs, and starts them buying it in tinfoil sticks. It can make A rich and ruin B. With a fixed and relentless number of dollars to play with, it can shift these dollars all over the map. But, as Veblen points out, the game is played in a closed market. You cannot lift yourself by your bootstraps. Further, "in such a closed market, the volume of purchasing power will be narrowed by approximately the aggregate cost of salesmanship."⁷

Branded Goods. Advertising has been accompanied in recent years by an increase in varieties of branded and packaged goods. Concerning this tendency Robert S. Lynd says:

While national brands unquestionably make for greater uniformity of quality, an important aspect of the consumer's use of branded goods is the increasing technical complexity of fabricated commodities such as foods, textiles. . . . This tends to remove further the complex of characteristics blanketed by a brand name from the sorts of empirical comparisons that were more often possible a generation ago when there were fewer brands and more commodities were produced in the home. Again, there is a tendency in the ceaseless quest for what advertising men call "million dollar merchandising ideas" (e.g. "halitosis" as applied to Listerine) to disguise commodities still further by identifying them with cryptic characteristics. Along with this goes the tendency to drive goods and their real names off the retail market.

Meanwhile, the consumer is reported to be shifting at an accelerating rate from brand to brand and retailers are lamenting that "customer loyalty isn't what it used to be."⁸

Styles and Fashions. Changes in styles and fashions represent a similar development. Years ago there were definite seasonal changes in women's apparel. Now many city stores report month-to-month changes. Color harmony plays a great part in new styles, so that in 1930 it was said that

there are few department stores in which 40 out of 100 customers are able to substantially complete their ensembles they have started in their respective stores. . . . The manufacturers of each [item of clothing] are, quite

⁷ Stuart Chase, *The Tragedy of Waste* (Macmillan, 1925), pp. 112-13. The quotation in the last sentence is from Thorstein Veblen's *Absentee Ownership*.

⁸ *Recent Social Trends*, Vol. II, pp. 876-77.

naturally, selfishly interested in promoting certain fabrics and colors. . . . This may have been satisfactory in the past, when a hat was a hat, and a bag was a bag, but now that a hat is only one link in an ensemble, and the bag another link, it is very unsatisfactory. It defeats 30,000,000 women, all over the United States, in their attempts to match their hats to their bags, or their bags to their shoes, or their dresses to their hats.⁹

Government Aid to the Consumer. Public schools are extending their teachings to problems of diet, health, and clothing. Many excellent consumer publications have grown out of the work of the



United States Department of Commerce with various industries. The Federal Trade Commission protects the consumer by regulating unfair trade practices. The national Public Health Service uses the radio for public education. The United States Department of Agriculture has carried on education in print, by radio, and by home demonstrations.¹⁰

Professional, Technical, and Commercial Agencies to Aid the Consumer. The American Medical Association furnishes most of the information concerning questionable foods and drugs. The

American Standards Association, a federation of forty-five technical societies, trade associations, and federal departments, has encouraged standards in a few consumers' goods. Consumers Research, a private nonprofit venture, is a testing and educational service in the interests of the consumer. The National Consumers' League is a consumer-education agency affiliating some seventeen local and state branches, with a contributing membership of 2,500 in 1932.

Trade associations also engage in consumer education. Usually, however, their activities are directed toward making the public

⁹ *Buyer's Manual*, National Retail Dry Goods Association (New York, 1930), pp. 249, 251; quoted in *Recent Social Trends*, pp. 878-79.

¹⁰ *Recent Social Trends*, Vol. II, pp. 881-85.

conscious of their own products so as to increase their profits. Many businesses have set up home economics laboratories and demonstration kitchens and issue systematic news releases. A growing number of agencies are attempting consumer education in budgeting family income.¹¹

Limitations of Present Assistance to Consumers. Much of the activity described above is "education" in the virtues of a particular

Canned Fruits for Salad

Cans of mixed fruits for salad usually contain some discolored or mushy fruit, the individual taste of the various pieces is largely lost, and the bulk of the mixture usually consists of the cheapest fruit. Maraschino cherries, which are not recommended (see Handbook, Vol. VII, Part 3), are used. Frequently the mixture is made up of canned instead of fresh fruits, sometimes of inferior quality. . . .

Commonwealth (dist. Commonwealth Packing Co., San Francisco) Not all firm, flavor good, 26c per lb drained fruit. cr 31

A1

Kingko (King's County Packing Co., Oakland, Calif.) Some of fruit broken or mushy. Color and flavor good. 21c per lb drained fruit. cr 31

C1

Libby's (Libby, McNeill & Libby) Mushy pale fruit. Good flavor. 31c per lb drained fruit. cr 31

C3

Del Monte (California Packing Corp.) Several minor defects. Flavor good. 19c per lb drained fruit. cr 31

B1

. . .

[From Handbook of Buying, Vol. VII, Part 3]

This is a sample of the information which the Consumers Research makes available to its subscribers.

product. As such, it is skillful and truthful advertising, provoked by the desire to sell goods. Frequently, however, there are a hundred competing products just as good, and of these, ten may be doing the same sort of advertising. Other activities, by government and professional bodies, serve to warn people against the use of harmful products. But under the present laws even the federal departments cannot make public the names of specific brands which do not come up to standard.

¹¹ *Ibid.*, pp. 885-87.

The great tragedy is not the final consumption of harmful products—that is declining rapidly—but the waste of man power and materials in the social competitive struggle, a cost which must be carried by the consuming public. The real solution therefore lies in coördinating and planning major economic activity on a national scale.

If the federal Government spent a billion dollars a year (1) testing products which are to be used by the public and (2) educating people in the use of selected items, the expenditure might be more than made up in savings to the public. The difficulty is that the whole problem is tied up with the theory of the value of competitive enterprise. As long as the American people support competition, government is forced to let business concerns do as they please so long as they do not practice fraud.

SUMMARY

Family choices may be given a wise direction by the use of a complete budget, and by providing in the budget for various kinds of insurance. More and more, families benefit themselves by taking advantage of many new community services for health, recreation, and the like.

Business choices of goods for intermediate consumption must be based upon forecasting, which is tied up with the general problem of industrial coördination. Group, regional, and national uses of goods must be based upon the most efficient consumption of national resources consistent with the maximum health and pleasure of the consumers.

Our economic system sets up definite obstacles which interfere with a rational choice of goods. Advertising, branded goods, and an infinite variety of short-lived fashions have social utility. But since these developments are manifestations of competitive profit-seeking, rather than the result of industrial coördination, they bring certain evil effects. First, they cause tremendous social waste in the endeavor to transfer trade from one firm to another. Second, they often fool the consumer who is seeking to exercise a rational choice.

Many agencies—governmental, professional, technical, and commercial—seek to protect the consumer against the dangers of poorly made and adulterated goods. But the greater problem of eliminating

waste in the competitive struggle awaits the development of adequate social control.

QUESTIONS AND PROBLEMS

1. Make a weekly budget for your personal expenditures. Keep account of what you spend during a week and check with your budget. Tell in a paper about a page in length whether your budget worked or not, giving reasons in either case.
2. Find out (a) what a personal budget is; (b) reasons for having a budget; (c) principles of budgeting; (d) methods of making a budget.
3. What is a *family budget*? Mention the chief items that should be included in such a budget. Point out the chief values in having a family budget.
4. Review Engel's law. How may it serve as a guide in planning family expenditures? Illustrate.
5. Make an annual budget for a family of five—father, mother, and three children of high-school age (two boys and one girl)—living near your high school in a rented apartment or house. Assume an income of \$3,000.
6. Of what *practical* value is the keeping of a record of one's personal expenditures or of the expenditures of one's family? Be specific.
7. Make a budget of your own for next year on a month-by-month basis. Suppose you earn or are given a monthly allowance by your parents, out of which you are expected to pay for clothing, gifts, toilet articles, magazines, school needs (excluding tuition, room, and board), recreation of every kind, transportation, a possible dentist's or doctor's bill, and any emergency that may arise. In addition to providing for such expenses, set aside funds for regular savings. List all items included in your budget under definite headings.
8. What is meant by *intermediate consumption*? Is wisdom in intermediate consumption entirely a question of forecasting and coördination? Why?
9. Give several examples of regional adaptation to natural conditions.
10. Rank the following foods in the order of their desirability from the viewpoint of national economy: corn, milk, pork, wheat, beef, green vegetables.
11. Is the tendency of a nation to use more costly foods desirable?
12. In what sense is advertising activity a social waste? Can you name instances in which you have been benefited by commercial advertising?
13. Are rapidly changing styles and fashions made in response to consumer demands?
14. *Report for a volunteer*: The "truth-in-advertising" movement.
15. Mention agencies that exist for the protection of the public against harmful goods.
16. Is the danger of harmful goods the chief evil of advertising?

17. Name agencies that exist for directing advertising toward securing the greatest degree of human welfare.
18. Advertising as practiced today is a manifestation of lack of industrial coordination. Does advertising increase or decrease this evil which it manifests, or does it have no effect upon the evil? Why?
19. What is meant by the statement that general conceptions of social organization cut across every specific social problem, however narrow?

Part Seven

RAISING THE LEVELS OF LIVING BY INTERNATIONAL COÖPERATION

Looking Backward—and Forward

HAVING completed the study of the purely national aspects of American economic life as it exists today, we are prepared to summarize our findings.

1. Levels of living are not satisfactory. At best, one-third of our population live regularly in poverty, and when depressions come one-half of our people remain in or sink into poverty. On the comfort

activity at the docks and in the warehouses, but we seldom stop to trace to their beginnings the constant streams of commerce, or to ask ourselves why such movements create special problems. When goods cross national boundaries novel problems arise, for different nations have different laws governing industry and trade, different systems of currency, and different ideas concerning the advantages of trading with one another. All these differences among the nations bring up knotty economic problems which affect the levels of living of all people, Americans included.

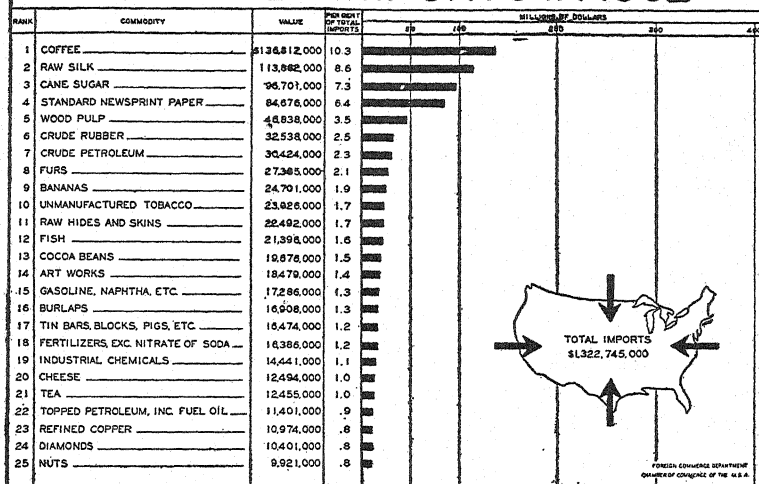
Our Relative Self-Sufficiency. America is favorably equipped in economic matters. We have the widest territory unhampered by trade restrictions of any country in the world.¹ We have a wide range of soils and climates, and in consequence are able to grow many different crops. We have a wide variety of mineral resources and an abundant supply of power. In addition, we are the most advanced nation of the earth in the development of productive efficiency on a large scale. Considering the period since the Civil War as a whole, these conditions have all contributed to give us the highest levels of living any people has ever known.

Our Dependence on International Trade. Favored as we are, we still lack many commodities which are supplied by regions outside our own boundaries. On the other hand, we are blessed with a superabundance of goods which we may exchange for those we need. An idea of our dependence on other peoples and of their dependence on us may be secured by glancing at a list of the most important goods we export and import. The following graph shows the twenty leading imports and exports in 1932.

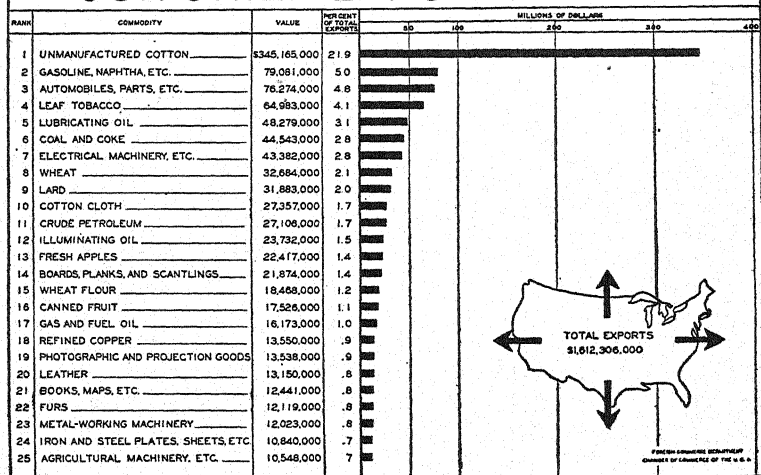
Principle behind International Trade. Many times in this book we have referred to the advantages of far-flung commerce. Not only does such commerce give people in one section goods which they cannot produce at all, but it also enables each section to specialize in those goods which it can produce most efficiently and to buy from other sections those necessities and luxuries which the other sections can produce best. By freedom of trade and specialization wealth is multiplied.

¹ Except Russia, if all the federated Soviet Republics are included. But Russia has not yet reached our level of industrial and commercial development.

OUR CHIEF IMPORTS IN 1932



OUR CHIEF EXPORTS IN 1932



(Courtesy The Chamber of Commerce of the U. S. A.)

The United States lacks almost entirely such commodities as tin, vanadium, chromium, nickel, platinum, asbestos, rubber, many tropical fruits, certain vegetable oils, coffee, silk, potash, quinine. If we attempted to produce such goods, the undertaking would prove costly and in certain instances impossible. It is much cheaper for us to produce such commodities as cotton, corn, wheat, petroleum, coal, and iron and to exchange them for the materials others can produce more cheaply. It is even possible that our advantages in such production are so great that it is cheaper for us to limit our energies to developing such commodities rather than to trying to raise other goods which we could not produce as cheaply as other countries can.

THE MECHANICS OF INTERNATIONAL TRADE

Foreign Exchanges. Trade among nations does not arrange itself. Complicated mechanisms of exchange are needed to facilitate it. For



Gathering latex on a Sumatra rubber plantation. (Courtesy Goodyear Rubber Co.)

example, the settlement of debts owed by Americans for goods brought into the United States or owed to Americans for goods they send out of the country, are not made on a basis of barter any more than debts are so settled within the country. Instead, we have markets for *foreign exchange* to which an American importer can go and buy *paper* with which he can settle his debts abroad. He could not directly use American dollars for payment because foreign countries use pounds, francs, marks, or other kinds of money as their means of exchange. The paper bought by the American importer happens to be in the market because someone abroad has bought American goods and has sent the paper here to discharge the debt. Pounds, marks, francs, or pesos could not be sent because we use dollars in our business.

For example, the settlement of debts owed by Americans for goods brought into the United States or owed to Americans for goods they send out of the country, are not made on a basis of barter any more than debts are so settled within the country. Instead, we have markets for *foreign exchange* to which an American importer can go and buy *paper* with which he can settle his debts

But just as the clearing-house in a city or a district operates to cancel the mutual obligations of the banks within its territory and to pay only the remaining balances, the foreign-exchange market operates to cancel the obligations of importer and exporter. Accordingly only balances in gold actually move backward and forward between New York and London, or between New York and Paris. What is bought from America will partially cancel what is sold to America; gold will be moved from one country to another only to pay net differences. Even when we are off the gold standard international payments must be in gold.

Gold Points and the Flow of Gold. The market for the paper is well organized in all important buying centers so that *bills on London* can always be bought in the New York market and *bills on New York* can always be bought in the London market. But if trade runs more heavily one way than another, the price of such bills will be high in one place and low in the



MR. X, New York Importer, has just made a contract with Senhor Riveiro of Brazil for 500 bags of Santos coffee. He is financing the shipment at New York.

Approximately ten thousand American Dollars in New York must turn into an equivalent in milreis in Brazil before the coffee becomes the property of Mr. X.

What happens? Here is the common procedure:—

1. Mr. X asks his New York bank, the Seaboard, to issue a letter of credit in favor of Senhor Riveiro for \$10,000. We issue the letter of credit, authorizing Senhor Riveiro to draw a draft on us at 90 days sight.
2. The letter of credit is delivered by the Seaboard to Mr. X, who in turn forwards it to Senhor Riveiro.
3. In due course Senhor Riveiro receives the letter of credit issued in American Dollars. He prepares the necessary documents, makes shipment and draws his draft on the Seaboard at 90 days sight.
4. Down in Brazil Senhor Riveiro presents his draft to his local bank which immediately pays him the equivalent of the draft in milreis at the current buying rate for 90 day sight drafts on New York. Senhor Riveiro has now been paid for his coffee.
5. The Brazilian bank, having designated the Seaboard its New York collecting agent, forwards all documents and draft to us for acceptance and credit.
6. The Seaboard accepts the draft, discounts it after acceptance, and places the proceeds to the credit of the Brazilian bank. The Brazilian bank has now been reimbursed for its loan.
7. The Seaboard then delivers documents to Mr. X accepting in return, his Trust Receipt.
8. Mr. X now clears his shipment of coffee, sells it at a profit and pays his draft. The Seaboard now has been reimbursed for the credit extended to Mr. X. The Transaction is closed.

Importers and exporters, alike, appreciate the careful yet rapid handling of their foreign banking affairs at this Bank. We shall be very glad to show you what we can do for you.

FOREIGN DEPARTMENT

The Seaboard National Bank

OF THE CITY OF NEW YORK

The story of an international transaction.
(Courtesy The Seaboard National Bank.)

will be high in one place and low in the

other. If the trade difference becomes sufficiently great, gold bullion will be sent from the low market to the high one to correct the balance. For such shipments to take place, however, the price difference must be great enough to pay for the costs of shipping the gold from one market to the other.

The points at which gold will move into or out of a market are called the *gold points*. These points, it must be remembered, equal approximately the cost of shipping gold from one country to another. Between New York and London, for example, the cost of shipment is about 3 cents to the pound and the rate of exchange therefore seldom varies from par, or face value, more than 3 cents *above* or *below* this figure. If the rate goes beyond the 3-cent limit, gold will be shipped instead of paper.

Trade Must Balance. Any commodity that the people of one country need and do not have can come to them only from the people of another country. This is the reason for international trade. But commodities will come into a country only if the people can pay for them. Paying for commodities consists in sending back something else in exchange, or doing something which other nations are willing to pay for. In the long run, therefore, the value of the goods and services which go into and come out of a country will always have to balance, for all trade movements are *exchanges* of one thing for another. What is exchanged for goods, of course, may not always be other goods; it may, in fact, be gold or it may be services. But somehow imports must always be paid for by exports. A nation that has nothing to give in exchange for imports can secure no imports. But one that has something to give can command the resources of all lands and the arts of all peoples to supply it with goods, provided no artificial restrictions, such as we shall discuss shortly, interfere with the exchange.

Favorable and Unfavorable Balances of Trade. Despite the fact that trade must really balance, nations have long considered it desirable (erroneously, we believe) to have what they believe to be a *favorable* balance of trade. A balance is called favorable when, at the end of any period, a nation is found to have exported *goods* having a greater total value than the *goods* which it imports, so that the difference in value must be paid for in money. One would naturally think a nation poorer for having given other nations more of its goods than it received of theirs; but in the eighteenth century, when the theory of

mercantilism developed, the uses of cash to support weak thrones were so important that money was valued more highly than other things (page 24), and although the mercantile theory is demonstrably unsound, a tendency still exists to congratulate ourselves on what we call a favorable balance.

In reality there is no favorable balance at all, for the total value of exports and imports must remain equal. When a so-called favorable balance appears, we usually find on closer analysis that we have loaned others the funds with which to pay us for the excess value of the goods we exported. Such loans must be placed on the debit, or *unfavorable*, side of our ledger, and therefore serve to balance our so-called favorable export surplus of goods. Loans of the sort mentioned are sometimes called *invisible items* because they do not appear in a statement of the flow of goods. But they serve to make the balance even nevertheless.

How the United States Balances Its Trade. The ledger of our international trade from 1922 to 1931 will make it clear that in the long run the value of imports must equal the value of exports.

TABLE 36

INTERNATIONAL LEDGER OF THE UNITED STATES, 1922-1931

Credit (Millions)		Debit (Millions)	
Export surplus of goods	\$ 5,967	Gold	\$ 519
Interest on foreign investments	4,985	Tourist expenditures	5,063
War debts	1,955	Immigrant remittances	2,142
	\$12,907	Miscellaneous	257
		Capital invested abroad	4,963
			\$12,907

When we examine Table 36 we see that the United States exported \$5,967,000,000 more in goods than it imported in goods. This goes on the credit side, because that amount is due us in payment, and makes us say that we had a favorable balance. The money paid us as interest on our foreign investments and the money paid us on war debts are also credit items.

Now let us look at the debit side. The gold we received is listed as a debit because it reduced the total amount due us (our credits). The expenditures of our tourists abroad are invisible items. But if an American goes to Europe and buys goods and services with Amer-

ican money, and consumes the goods in Europe or brings them back to America, the result is just the same as if he had stayed in America and imported the goods. Therefore, tourist expenditures are debits, just as ordinary imports would be. Similarly, an immigrant who comes to America and sells his services here, sending American money back to Europe, is in reality exporting European services, while we are importing them and paying for them. Therefore, such items belong on the debit side. In the same way American capital invested abroad is used to purchase foreign securities; this is generally the chief invisible debit item that serves to balance exports and imports.

Thus it is apparent that when we say a nation has a favorable balance of trade, we mean simply that it has exported *goods* faster than it imported *goods*, and that in general it loaned foreign nations the money to pay for the excess. Whether a situation of this sort is economically favorable to a nation is doubtful; the problem will be discussed later in relation to our present trade situation and the war debts.

How Trade Is Interrupted by Tariffs. Commerce among the nations is often deliberately restricted by import taxes. Such taxes are sometimes levied because the taxing of imports is an easy way to obtain revenue; sometimes import duties are levied to protect home industries from competition abroad. This second type of duties forms the most serious interruption to international trade, because the very purpose of such a tax is to restrict trade.

Arguments against the Protective Tariff. Many economists condemn the protective policy. They maintain that there is an economic advantage in regional specialization and that what each region can do most efficiently has nothing to do with national boundaries. They admit that tariffs can develop industries, but they insist that to force an industry to grow in a place where the cost of production is higher than in some other place is to raise prices to consumers. Since workers are also consumers, the prices of the goods they buy are raised along with the prices of the goods other people buy, and in consequence, although money wages may be higher under a protective tariff, the real wages of workers may be even lower. On the other hand, they say, the market would be wider, industries larger, and employment greater and more continuous if we devoted ourselves to what we could do most efficiently. A country organized on a basis of this sort would, they maintain, be far better off than one which,

under the protection of a tariff wall, produced goods for whose production it was not suited. Oranges, they say, can be grown in hot-houses—but it does not pay to raise them there.

These economists also declare that if industries are to be maintained because their products are essential if war comes, the expense thus caused to consumers ought to be put down as one of the costs of war, and the people who pay the high prices for goods ought to be so informed. Instead, they are told that tariffs for protection are part of a sound economic policy apart from their utility as means of self-defense.

Some economists maintain that the effect of tariff walls on the welfare of the countries of the world is similar to what the effect would be on the welfare of the United States if each of the states should decide to "protect" itself economically from all the others in order to force the growth of home industries. Instead of raising corn and wheat, Kansas would then try to manufacture iron and steel, New England would try to raise cotton, and Florida to mine coal. Much of our progress, they declare, is due to the fact that we have no tariffs in all our broad expanse of territory. We might secure similar advantages, they think, by trading freely with the countries that produce rubber, vegetable oils, sugar, and coffee.

Arguments for the Protective Tariff. On the other hand, there are arguments in favor of a protective tariff. A country with low standards of living for its workers has low labor costs, and may be able to undersell a country with higher standards even when the latter country is producing more efficiently. A protective tariff may prevent this. Such a tariff may also give a new industry a chance to develop to the point where it can make better and less expensive goods than are made abroad, while without the protection given by the tariff the infant industry would be ruined by competition before it reached maturity and strength.

The present age is characterized by rapid changes in various countries, involving the complete or partial reorganization of social and economic systems. During periods of internal reconstruction, it may be important that domestic policies should not be interfered with by the unregulated influx of foreign goods. For example, American processors, subject to the processing taxes of the Agricultural Adjustment Act of 1933, could not compete with goods processed abroad and not subject to similar taxes. Therefore the act

provides that whenever a processing tax is levied upon a basic agricultural commodity, there shall be an equal tax upon the import of similar commodities. Likewise the National Industrial Recovery Act of 1933, which will be discussed later, authorizes the President to stop the importation of foreign goods when the competition of such goods hampers the policy of insuring a decent wage to American labor.

Thus it is a mistake to be dogmatic on the side of either free trade or protection. Unquestioning allegiance to free trade is the policy of *laissez faire*. With the growth of the planning idea, customs duties will be regarded as one of the social instruments that, like taxation and government regulation of various sorts, may be used intelligently to promote national or international objectives.

TENDENCIES IN THE INTERNATIONAL TRADE OF THE UNITED STATES, 1922-1929

Rapid Growth in Foreign Trade, 1922-1929. During the prosperous years after the World War, our foreign trade expanded enormously. The aggregate value of imports of merchandise into the United States increased from \$3,113,000,000 to \$4,399,000,000, at an average annual rate of 3.9 per cent. Exports increased from \$3,765,000,000 to \$5,157,000,000, at an average rate of 4 per cent a year. During the whole period the quantity of imports increased 34 per cent and their value increased 42 per cent, while the quantity of exports rose 51 per cent and their value rose 37 per cent.² In 1929 our foreign trade was \$9,640,400,000, while that of the United Kingdom, to whom we ranked second, was \$10,024,100,000.

Changes in the Character of Our Foreign Trade. The present century has witnessed great changes in the composition of our foreign trade. Raw materials have come to play a less important part in our exports, while manufactured goods have gained the ascendancy. The following table illustrates what the trend has been.

Table 37 indicates that total manufactured goods rose from 57.8 per cent of our total exports in 1901 to 72.6 per cent in 1929. During the same period crude goods fell from 42.2 per cent of the total to 27.4 per cent. These years, however, saw no significant change in the character of our imports. In 1929 crude goods imported represented 47.6 per cent of the total value and manufactured goods 52.4 per cent.³

² F. C. Mills, *op. cit.*, pp. 461, 462.

³ *Ibid.*, p. 469.

TABLE 37

COMPONENT ELEMENTS IN THE EXPORT TRADE OF THE UNITED STATES ⁴

<i>Commodity Group</i>	<i>Percentage of Total Exports, by Value</i>			
	<i>1901</i>	<i>1913</i>	<i>1922</i>	<i>1929</i>
Crude materials	28.6	34.3	26.2	22.2
Semimanufactures	9.7	16.1	11.7	14.1
Finished manufactures	23.8	31.1	34.3	49.1
Crude foodstuffs	13.6	5.9	12.2	5.2
Manufactured foodstuffs	—	12.6	15.6	9.4

Significance of the Change in the Character of Our Exports. Great significance lies in the facts that (1) manufactured goods form a far larger percentage of our exports than do crude goods, and (2) manufactured goods have in recent years formed an increasing percentage of our exports. The tendency of progress in leading

TABLE 38

TWENTY MOST VALUABLE IMPORTS AND EXPORTS OF GREAT BRITAIN, 1925

<i>Imports</i>	<i>Exports</i>
1. Cotton	Cotton piece goods
2. Meat	Iron and steel
3. Wheat	Machinery
4. Wheat flour	Electrical goods
5. Sheep's wool	Coal
6. Butter	Coke
7. Lumber	Woolen cloth
8. Copper and lead	Worsted cloth
9. Tea	Cotton yarn
10. Sugar	Nonferrous metals
11. Fruit	Chemicals
12. Mineral oils	Clothing
13. Oil seeds	Wool
14. Crude rubber	Wool tops
15. Iron and steel	Paper
16. Hides and skins	Spirits
17. Flax, hemp, jute	Worsted yarn
18. Eggs	Automobiles
19. Cattle for food	Manufactured tobacco
20. Cheese	Linen piece goods

⁴ *Ibid.*, p. 470.

nations since the advent of mechanical power has been toward increasing their industrialization and purchasing their raw materials from outside areas. Our advance in this direction has been one cause of our relatively high levels of living. Great Britain is the classic example of the highly developed nation which has become a great workshop. This is shown by the list of her exports and imports.

Brazil, on the other hand, is a country which has not reached a high stage of industrial development. Consequently she exports little but raw materials. Although she has to bring in many food-stuffs because of the nature of her territory, most of her imports are finished goods, made partly out of her own materials in England, Germany, and the United States.

TABLE 39

ELEVEN MOST VALUABLE IMPORTS AND EXPORTS OF BRAZIL, 1927

<i>Imports</i>	<i>Exports</i>
1. Machinery	Coffee
2. Wheat	Cacao beans
3. Cotton piece goods	Hides and skins
4. Automobiles	Matte
5. Wheat flour	Crude rubber
6. Gasoline	Raw tobacco
7. Chemicals and drugs	Oil seeds
8. Codfish	Sugar
9. Iron and steel	Raw cotton
10. Paper and manufactures	Beef
11. Cement	Cornauba wax

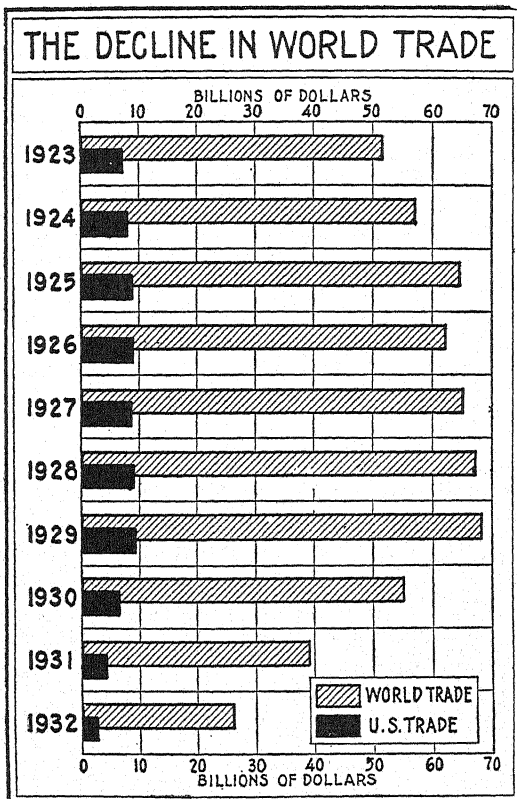
The United States' Favorable Balance of Trade, 1922-1929. During the great expansion of its markets between 1922 and 1929, the United States exported more goods than it imported in order to have a so-called favorable balance of trade. If we look again at the international ledger of the United States discussed earlier in this chapter (page 465), we see that our export surplus of goods was almost \$6,000,000,000 for the period 1922-31. We see also that we had to lend Europe the money to buy our goods. And if we go back to the end of the war, we find that we lent Europe \$13,000,000,000 from 1918 to 1929 with which to buy our goods and to pay their debts to us. At the same time our high tariffs prevented Europe

from repaying us in goods. We must bear these tendencies in mind in considering events since 1929.

DECLINE IN THE FOREIGN TRADE OF THE UNITED STATES AFTER 1929

Decline in Our Foreign Trade, 1929-1933. The foreign trade of the United States, which was \$9,640,400,000 in 1929, fell to \$4,514,200,000 in 1931—a drop of 53.2 per cent. Even when we correct this figure by the use of index numbers of price-levels, we find a real decline of over 30 per cent. The value of our exports was \$5,200,000,000 in 1929, \$3,800,000,000 in 1930, \$2,400,000,000 in 1931, and \$1,700,000,000 (on the basis of first six months) in 1932. During this period the money value of our exports fell 67.8 per cent, while the level of wholesale prices dropped only 33 per cent. Severe as was the decline in our internal economic activity, the decline in our international trade was even more severe.

Between 1929 and 1931 every nation suffered a severe decline in its foreign trade. But it is significant that our decline was the worst. Compared with our



(From *The N. Y. Times*, June 6, 1933.)

loss of 53.2 per cent, the loss of the United Kingdom was 36.2 per cent, that of Germany 39.9 per cent, and that of France 33 per cent.

Evil Effects of the Decline. Some people claim that, since our foreign trade is only from 8 to 10 per cent of our total commercial activity, there is no severe loss to us in the decline of our foreign trade. This is a mistaken conclusion for several reasons, the most important of which are (1) the importance of foreign trade to a selected group of our industries, and (2) the dislocating effect of the decline upon those trends in our commerce to which our economic system had become responsive.

Many of our economic groups depend heavily upon foreign trade, and these are hurt severely by a curtailment of international exchange. For example, in 1929 this country exported 54 per cent of its cotton production, 17 per cent of its wheat, 20 per cent of its rye, 41 per cent of its leaf tobacco, 23 per cent of its agricultural machinery, 36 per cent of its copper, 40 per cent of its typewriters, 20 per cent of its locomotives, 10 per cent of its automobiles, 23 per cent of its agricultural machinery, 39 per cent of its kerosene, and 31 per cent of its lubricating oil. The falling-off in these lines of activity affected disastrously every channel of domestic trade, because the purchasing power of the operators and workers in the activities mentioned was sharply curtailed.

Dislocating Effects upon Major Trends. The increase in the proportion of exported manufactured goods to total exports during this century has been, as was indicated before, a salutary feature of American economic development. After 1929 a rude reversal occurred, and in 1932 manufactured goods exported were only 63.4 per cent of the total outgo as compared with 72.6 per cent in 1929, while crude goods rose from 27.4 per cent to 36.6 per cent of the total. This is an enormous change for so short a period.

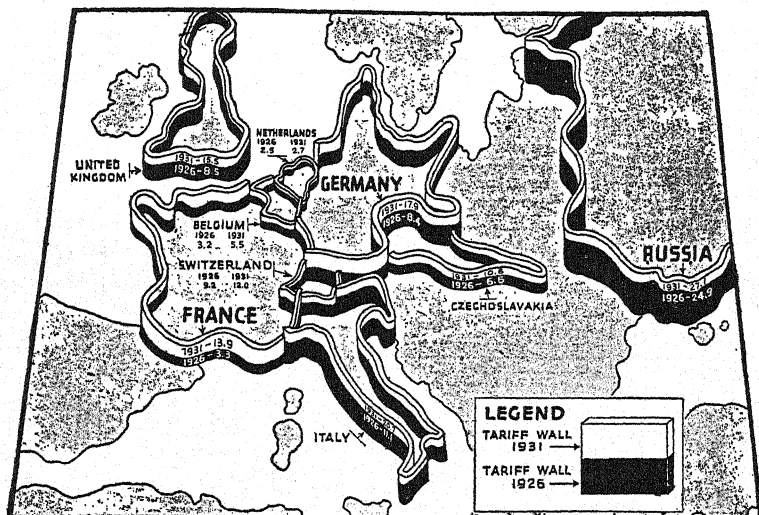
A second important change in trends also occurred. Our balance of trade became less favorable in terms of a surplus of exports of goods over imports of goods. During the first half of 1932 our exports fell 23.3 per cent and our imports fell only 10.7 per cent. This change in trend may be welcome in view of what we shall say presently in regard to the deadlock in the international situation. But dangers always occur when trends or relationships to which our productive and commercial machinery has become geared are suddenly reversed.

CAUSES OF THE TRADE DECLINE, AND POSSIBLE
REMEDIES

General Economic Depression a Cause of the International Trade Decline. Undoubtedly the general world-wide depression of the thirties has been the main cause of the trade decline. If people cannot keep their own houses in order, there is little chance of continuous accord with their neighbors. Remedies for the situation lie somewhere within the proposals for economic well-being previously described.

But there are specific problems of international trade which may be met wisely or foolishly, and how they are met exercises a powerful modifying influence on the general situation. The first of these is the tariff question.

Recent Tariff Restrictions a Cause for the Decline in Trade. In June, 1930, the United States passed the Hawley-Smoot tariff, the highest in recent years, which raised the rates on over 650 articles.



How much higher can these walls be built without shutting off international trade entirely, with a great decline in the variety of goods available to each country? In addition, we must remember that some of these walls bristle with forts and bayonets to protect them from invasion, thus threatening the peace of the world. (From *The U. S. Daily*, May 13-20, 1933.)

The tariff was prompted by the need for revenue, by the general arguments for protection, and by the persistence of the idea that America could sell goods abroad without buying goods in return.

The Hawley-Smoot Tariff Act was met by a swarm of retaliatory measures from abroad. The Canadian Government adopted measures that tended to give preferences to Great Britain over the United States. Argentina entered a reciprocal agreement with England for the purchase of raw materials and manufactured goods, and consequently our trade with Argentina fell off considerably. Most important of all, England in 1931 abandoned its traditional free-trade policy and imposed a 10 per cent duty on a long list of articles.

Other Checks to Foreign Trade. In 1931 many foreign countries adopted devices other than the tariff that helped to curtail our exports. *Quotas*, which limit imports by value or by volume, were established by France, Spain, and several smaller European countries. *Licenses*, restricting imports by requiring that the importer apply for a license before each transaction, have been used by about ten European countries. Over twenty countries have *exchange controls* to regulate the foreign exchanges of their currencies, to prevent the flight of capital, and thus to check regular trade in goods. In addition, nineteen nations went off the gold standard in the last half of 1931,—actions which naturally checked purchases from countries like the United States that were still on the gold standard and demanded payment in gold.

Relation between Our Tariff Policy and Foreign Trade Restrictions. The foregoing retaliatory measures were not mere spitework, for nations do not act that way. We have shown that our trade with foreign nations must be represented by a balance of *debts* and *credits*. The ledger we studied on page 465 shows the composition of that balance from 1922 to 1931. Our credits in the form of a so-called favorable balance of goods and the debt and interest payments made to us were balanced by our debts, such as tourist expenditures, immigrant remittances, our investments in foreign securities, and the gold payments made to us for our export surplus.

Now it is obvious that our credits are the debts of the nations trading with us, and that our debts are their credits. Let us see how their credits shrank after 1929. Expenditures of American tourists abroad went down tremendously owing to the economic depression in America. The same result took place in immigrant remittances.

Most important of all, the sources of our loans abroad dried up. New long-term foreign issues on the New York Stock Exchange were over \$1,000,000,000 in 1928, \$671,000,000 in 1929, \$905,000,000 in 1930, \$229,000,000 in 1931, and nothing in 1932. We ceased to be able to lend money to buy our own goods.

Since the nations trading with us found their credits so reduced, they had to reduce their debits—that is, our credits—which are our exportable surplus of goods and the payments of money owed us as interest and principal on our investments abroad. To reduce our exportable surplus of goods, these nations had to sell more goods to us or buy less from us. Our high tariff prevented increasing their sales; hence they were forced to stop buying.

Here we have the heart of the problem. In the long run goods must be paid for with goods. We could not go on indefinitely having a foreign market for our goods and closing our markets to foreign goods. We could lend money to buy our own goods for a while, but not indefinitely. When the time came to pay the money back, the payment became one of our credits and we had to allow the other country a credit in the form of goods shipped to this country. If we will not buy goods, we cannot be repaid nor can we sell more of our own goods.

Possibilities of Tariff Revision. The Democratic party, which went into power in 1933—and we must remember that the tariff is a party issue—did not propose any material tariff revision downward. It favored a *production-costs* tariff, which is a protective tariff aimed to protect from outside competition goods which it costs more to produce here. It also proposed a *bargaining tariff*, aimed at reciprocal agreements with certain nations, but such a policy could hardly be effective so long as the principle of protection is adhered to. In this situation there seem to be only two alternatives. First, if the people at large realize the clear-cut issue behind the tariff question, they will be able to decide whether they want what the tariff gives more than they want what it takes away. We cannot be dogmatic; our task is only to explain the issues.

The less pleasant alternative is that other nations will adopt stronger retaliatory measures. The British duty of 10 per cent contains a provision that it may be raised to 100 per cent in order to secure bargains, to develop preferences within a far-flung empire, or to initiate an informal alliance among many nations, which might

exclude the United States. Quite aside from the economic inadvisability of such an international condition, the problem is fraught with danger of political discord of the most far-reaching sort. The aim of the present must be mutual concessions and accord.

SUMMARY

Although the United States is a relatively self-sufficient nation, we benefit greatly from international trade. The two fundamental principles of trade are (1) that every nation shall enjoy the varied products of the earth and (2) that every commodity should be produced where it can be created most economically.

The fundamental mechanics of trade among the nations are (1) that foreign exchanges serve as international clearing-houses; (2) that the exports and imports of a nation must balance; (3) that tariffs serve as barriers to trade and have uneconomical aspects in so far as they work against the principle of production in the most suitable areas; (4) that nations must at times resort to tariffs in order to work out their domestic problems without outside interference.

During the period from 1922 to 1929 our foreign trade expanded, we became predominantly a manufacturing nation, and our balance of trade was what is called favorable. After 1929 a disastrous decline took place. Although this decline was caused chiefly by general economic conditions, tariff barriers of the most stringent sort contributed to it. These barriers grew out of the policy of the United States of trying to sell goods by lending money rather than by buying other goods. Such a policy could not continue indefinitely and our choice now seems confined to giving up some of the benefits of protection or else losing much of our international trade. Although few concrete solutions have been offered, the issues seem to be clear. The situation is fraught with danger of international discord.

QUESTIONS AND PROBLEMS

1. Find out what industries in your community, if any, depend upon foreign countries for materials they use in their undertakings or enterprises.
2. List articles of food on your family table and household goods in your home that come from other countries.

3. Give examples of goods produced in your community that are sold in other countries.
4. From Nos. 1 to 3 and from the facts in the chapter, draw conclusions as to the effects upon employment and upon our standards of living if our trade relations with foreign lands were to be completely severed.
5. An educated Chinese; in commenting upon the industries of the United States and the countries of western Europe, made this statement: "You Westerners produce what you cannot consume, and you consume what you cannot produce." What did he mean?
6. What factors determine the imports and exports of a country? Explain by using Mexico, Great Britain, or the United States as an example.
7. What purposes are served by foreign exchanges? What are meant by *gold points*?
8. Explain why trade must balance. What do we mean when we say that a *favorable* balance of trade may be *unfavorable*?
9. What are the chief *debit* and *credit* items in an international ledger?
10. Outline the chief arguments for and against a protective tariff. In which direction do you believe the world is moving today? Why?
11. What do we mean when we cite the United States as an example of free trade?
12. Describe the significant features of the growth of the foreign trade of the United States between 1922 and 1929. How did the United States balance its ledger during these years?
13. Explain the main evil effects of a decline in foreign trade. Outline the major forms of restrictions upon international trade since 1929. What gave them their impetus?
14. In what sense did the international trade policy of the United States reach a deadlock after 1929? To what extent was this caused by the domestic depression?
15. If there had been no general depression, could the trade policy of this country have been carried on indefinitely? Give reasons.

READINGS IN THE CLASS LIBRARY

1. "Foreign Trade in American Agricultural Products," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 598-601.
2. "The Consular Service Aids Trade," Hart, *Twentieth Century United States*, pp. 186-89.
3. "Imported Merchandise and Retail Prices," Weld and Tostlebe, *A Case Book for Economics*, pp. 289-93.
4. "Exporting American Prosperity," *ibid.*, pp. 244-99.
5. "Cotton-Textile Industry in China," *ibid.*, pp. 308-12.
6. "Balance of International Payments," F. W. Ryan, *ibid.*, pp. 314-19.

7. "The Economics of the Eskimo Pie," *ibid.*, pp. 322-26.
8. "International Trade and Foreign Exchange," Patterson and Scholz, *Economic Problems of Modern Life*, pp. 292-309.
9. "International Trade and Foreign Investments," *ibid.*, pp. 312-30.
10. "The Mercantile System," Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 115-17, 128-33.
11. "International Trade and Price Levels," Clay, *Economics*, pp. 204-13.

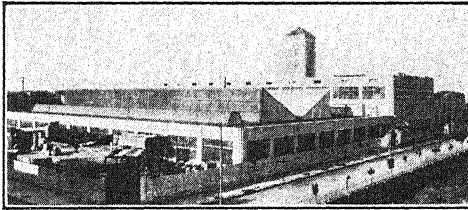
Chapter 26

ECONOMIC CONFLICTS AMONG NATIONS

EXPORT AND IMPORT OF CAPITAL

Why Capital Is Exported. Another phase of international economic relations which has momentous consequences is the movement back and forth of capital. People of one country make investments in other countries because of inequalities in development. The more advanced a nation is in industry, the larger will be the surplus of funds of its citizens. Such funds of course are mostly invested in business enterprises at home, but some of the surplus goes out to other countries.

Of the several reasons that explain the movement of capital to foreign countries two are especially important: first, the extension of the home market; second, the securing of an adequate supply of raw materials. For example, Mr. Ford builds an assembly plant in Buenos Aires to widen the market for Ford automobiles. Mr. Firestone, on the other hand, sets out rubber plantations in Liberia in order



to secure a supply of raw rubber. Both enterprises require the movement of capital out of the United States. Another sort of foreign investment is illustrated by New York bank loans for the building

of a railway in Java or Ecuador. Such loans reveal a surplus of funds moving to the most profitable investment market.

Countries That Export Capital. It is to be expected, then, that investments of capital will go out from such highly industrialized

Shipping News and De

Incoming Passenger and Mail Ships

Latest Information by Wireless

TODAY				
SHIP	LINE	FROM	DUE TO DOCK	PIER
MINNETONKA, Red Star....	Antwerp	Sept 29, Havre, Southampton	1:00 p m	58 N R W 16th st
AMERICAN BANKER,	American Merchant.....	London Sept 29	8:30 a m	58 N R W 16th st
SCYTHIA, Cunard.....	Liverpool	Sept 29, Cobh, Galway, Boston	a PM	54 N R W 14th st
CAMERONIA, Anchor.....	Glasgow	Sept 29, Belfast, Londonderry, Boston	8:00 a m	56 N R W 15th st
STUTTGART, North German	Bremen	Sept 28, Boulogne, Southampton, Halifax	8:30 a m	42 N E Morton st
CALIFORNIA, Panama Pa-	cific.....	San Francisco Sept 23, Cristobal, Havana	9:00 a m	61 N R W 21st st
HAITI, Colombian.....	Cristobal,	Kingston, Port-au-Prince	9:00 a m	38 Elyn Orange st
COAMO, Porto Rico.....	San Domingo	City Oct 3, San Juan	10:30 a m	27 N R Hubert st
QUEEN OF BERMUDA,	Furness	Bermuda Oct 7	9:00 a m	95 N R W 55th st
GRANADA, American Fruit..	La Ceiba		8:00 a m	30 E R Peck Slip
ALGONQUIN, Clyde.....	Jacksonville	Oct 6, Charleston	7:30 a m	27 N R Spring st

a Scythia arrives late today or early tomorrow.

TOMORROW

*ILE DE FRANCE, French..	Havre	Oct 4, Plymouth	—	57 N R W 14th st
PRESIDENT VAN BUREN,	Dollar.....	World cruise, Naples Sept 23, Genoa	8:30 a m	12th st Jersey City
MOREO CASTLE, Ward.....	Vera Cruz	Oct 4, Havana	9:30 a m	14 E R Wall st
PONCE, Porto Rico.....	San Juan	Oct 4	9:00 a m	15 E R Mald Lane
CITY OF ST LOUIS,	Savannah	Oct 7	7:00 a m	46 N R Charles st
ROBT E LEE, Old Dominion..	Norfolk	Oct 9	3:00 p m	25 N E Franklin st

WEDNESDAY, OCTOBER 11

EUROPA, North German....	Bremen	Oct 8, Southampton, Cherbourg	—	54th st B'klyn
MAN, United Fruit.....	Santa Marta	Oct 8, Kingston	—	7 N R E
and Dominion.....	Norfolk	Oct 10, Jacksonville Oct 8	3:00 p m	

An important type of service rendered by foreigners to this country is the carrying of passengers and freight to and from the United States. The table above lists some of the boats which make regular calls at the Port of New York many times each year. (From *The N. Y. Herald Tribune*, October 9, 1933.)

countries as Great Britain, France, Japan, and the United States and flow into the Far East, Africa, and South America, that is, to other countries that are backward industrially. And this is exactly what happens. Until a few years ago the United States was so undeveloped

that it offered a profitable field for the investment of British, German, and French funds. The World War stimulated our development, however, and since that conflict our progress has been rapid. We now export more capital than any other nation. Our rate 1919-29 was about \$1,500,000,000 a year and the total amount invested abroad was approximately \$14,000,000,000. Since 1929 disturbed international conditions have led to the default of many of our loans and to a slowing-up of capital export.

How Capital Is Repaid. Whatever dividends and interest are earned by exported capital must be paid to us by the people of the countries in which the capital is invested. Obviously they can pay in only three ways: (1) in gold, (2) in goods, or (3) in services. In such undeveloped regions as South America most payments must be in goods—raw materials—for the people have little gold and they are able to offer few services such as England renders by her shipping facilities. This means an increasing import of goods into the United States in return for the use of our capital abroad.

Friction over the Repayment of Loans. The arrangements that are made to insure the flow of goods to us in payment for our loans of capital are constant sources of international irritation. Taken together with rivalries for markets and sources of raw materials, they form one of the most fruitful sources of international friction and may possibly lead to war.

ECONOMIC ISSUES AND NATIONAL CONFLICTS

National Rivalries over Markets for Investment. The necessity for international trade and the difficulties that arise over the export of capital from one country to another illustrate the curious mixture of the economic, political, and cultural forces that are involved in world affairs. Statesmen seek to extend the boundaries and the influence of their nations. Through political influence industries are often able to use their governments as aids in their own struggles for profits. Accordingly, it is frequently impossible to determine which actions originate in governments, which in groups of bankers, and which in the gigantic industrial concerns that often spread themselves completely around the earth.

Government Practices in Trade Rivalry. In the effort to extend the influence of national economic groups governments are con-

stantly on the alert. They maintain trade services in the markets of the world to furnish information to their citizens concerning all conditions which may affect the sale of goods. They are often ruthless in their treatment of the people of backward countries when there appears any threat to the sources of raw materials or to the safety of investments. Most important of all, perhaps, is their willingness to enter into controversies with each other concerning possessions or spheres of influence in backward lands. When great industries of different countries come into conflict, their governments often become involved. And when loans made to weaker governments or to their industrialists are not paid, the strong powers frequently feel impelled to collect the money by force if no other means are available.

Capital Investments as Causes of War. Although competition for markets and trade rivalries are often among the most important causes of war, most people do not realize that it is our everyday policy that leads in this direction. A few years ago several thousand American Marines were sent to Nicaragua. Why were they sent? First of all, to protect American lives and property; but mainly, many authorities declare, because the raw materials we need most—tropical fruit, sugar, vegetable oils, coffee, spices, hardwoods—come from the countries to the south of us. Such goods can be produced successfully only in tropical regions, and all the so-called great powers are located mainly in the temperate zones. We have therefore interfered in Mexico, in Central America, and in South America, for somewhat the same reasons that the European powers have interfered in Africa and the Far East.

We are fortunate in having comparatively few conflicts with other great powers, and we have been able to maintain the Monroe Doctrine, which prevents other nations from trespassing too greatly in the New World. But there are British, German, and French investments on our continent, and the European powers also secure some of their raw materials and sell some of their own finished goods there. Accordingly we are by no means free from the danger of conflicts, although our problems are less serious than those which arise among European nations.

Tremendous Cost of Wars. We have our wars, and we are not always able to keep out of conflicts that arise in Europe. In consequence we maintain an army and a navy at enormous cost, a cost not always appreciated by those who pay the taxes. War is by far the

largest item of our yearly national budget, if we include payments for wars that are past and preparedness for those that may come.

Instrumentalities to Prevent War. Many people realize the ever present danger of an outbreak of war and have tried to find ways to prevent international difficulties and to promote coöperation among the nations of the world. The disarmament conferences of 1930 and 1932 were recent steps in this direction. Long before the conferences, however, attempts had been made to build up codes of international law and to establish international courts of arbitration, so that peaceful solutions would at least be easier. The most ambitious instrument of this sort is the Covenant of the League of Nations, which was written into the terms of the Peace Treaty of Versailles. The United States has refused to join the League, however, and has also remained outside the Permanent Court of International Justice, commonly called the World Court.

Implications of Capital Export. Some economists say that our tremendous export of capital is made necessary by surplus savings which cannot be employed at home. They say that these savings cannot be employed profitably because of a faulty distribution of income which gives the mass of home consumers too little purchasing power to take goods off the market. In this fashion these critics tie up the question of production and consumption at home with the question of troublesome and unwise foreign ventures. These economists maintain, moreover, that many of our capital investments abroad are not for the good of the nation at large, but are motivated by the profit-seeking of those who own capital.

Sometimes such critics are right and just as frequently they are wrong. But it is important to raise the question whether a proper coördination in the public interest between home investments and foreign investments can best be secured by the action of "individuals working at cross purposes for private gain." In short, we must subject the problem of capital exports to the same tests and sift through our minds the same remedies as we did with the domestic problems discussed in previous chapters.

HOW EUROPE CONTRACTED ITS WAR DEBTS

Prolonged Costs of the War. The World War was costly while it was in progress; and its costs were by no means ended with the armistice. The European nations that took part in the conflict are still

engaged in paying the debts contracted during the war, and the victors have been unable to shift the costs to the vanquished. Their failure to do so is partly because the total sum is far beyond the ability of the Central European powers to pay, and partly because of the difficulty of transferring large sums across international boundaries. The debts caused by the huge outlays from 1914 to 1918 are a heavy burden of taxation in every country involved, and have generated a vast amount of international friction about the settlements to be made.

How We Became Creditors before Entering the War. Before the World War we had been a borrowing nation. Other countries, especially Great Britain, had exported capital to us. In consequence, a considerable portion of the securities of American corporations was owned abroad, and our own holdings in foreign corporations were small. During the two and a half years before the United States entered the war, however, the needs of France and Great Britain for goods were increased, while their productive power was cut down by the great numbers of men at the front. We were the only neutral country with large resources and large manufacturing capacity, and therefore we sent goods abroad in enormous quantities. Naturally we did not import much from Europe.

Our huge credit item in the form of a favorable balance of goods made it necessary for our customers to balance their ledgers in some fashion. They had to increase their credit items. They could not ship us gold because their supply of the yellow metal would soon have been exhausted. Besides, the European countries naturally wished to retain a large portion of their stocks of gold in order to protect their currencies. Under the circumstances Americans could only invest in foreign securities so heavily that the one-sidedness of the exchange markets would be relieved. Moreover, foreigners began to transfer to Americans their holdings of capital in American concerns. In consequence, European credits equaled their debits and by the end of the war we had practically bought out all foreign holdings here and in addition had made investments in Europe running into several billions. In this way Europe contracted private debts with the United States.

Contracting of Public Debts to the United States. All this was private business, at least it was private here; much purchasing from American concerns had of course been done by foreign governments. But when we entered the war the situation changed, for an exchange

of funds arose between our Government and the governments of our allies. The main purpose of the loans was to enable the European governments to go on buying here, since they had almost exhausted other means of paying for American goods. Before the war ended, the total of the debts to us became very large. Not only Great Britain, but also France, Belgium, Italy, and other European countries owed us immense sums.

Contracting of Heavy Internal Debts. The Allies also contracted heavy internal debts. Buying for armies and navies of the size of those engaged in the conflict required expenditures wholly without precedent, and of course all the necessary sums were not raised by taxation. Most of the funds were in fact secured by internal loans made in the form of bonds. In addition, there were international debts to be settled, with the United States as the chief creditor nation, for even Great Britain owed us far more than was due her.

HOW EUROPE HAS TRIED TO MEET ITS WAR DEBTS

Currency Inflation to Pay Internal Debts. Not only international obligations con-

\$400 Sent to Austria in 1916 Is Now Found Worth 4½ Cents

Special to THE NEW YORK TIMES.

CHICAGO, March 19.—Mrs. Chane Stiefel, a 70-year-old native of Vienna, came to Chicago with her family in 1910.

They gradually accumulated a modest savings account, and when \$400 had been laid away, Mrs. Stiefel became distrustful of American banks. The whole sum was sent to the Postal Savings Bank in Vienna, and recorded there on May 15, 1916, in the form of 3,100 kronen.

Recently, in an effort to recover the deposit, a letter was sent to Ernest L. Harris, American Consul in Vienna, for Mrs. Stiefel had now become a naturalized American.

His reply, received today, read as follows:

"The Consulate General has to inform you that due to the depreciation of the Austrian kronen currency to 1-14,440 of its pre-war gold value, the 3,100 kronen of Mrs. Stiefel now represents the equivalent of 31 groschen, or 4½ cents if converted into United States currency.

"This is not sufficient to cover the postage for an ordinary letter to the United States from Austria.

Mrs. Stiefel cannot recover her loss, because she made a private deposit in an Austrian bank just as if she had been a resident of that country. But if the American Government had lent \$400 to Austria, the loan would have been payable only in \$400 worth of gold. (From *The N. Y. Times*, March 20, 1932.)

tracted during the World War by the European countries but also their internal obligations had to be met. But the running expenses of the governments, swollen for war purposes, were hard to reduce; and bonds began to fall due. How could the debt be paid? One thing the governments could do was to print money and pay internal debts with the new currency.

Of course, as has been pointed out in previous chapters, the purchasing power of money declines as the quantity increases; but the plan would enable the governments to meet their pressing obligations. The result of such *currency inflation*, as a practice of the kind is called, was that the value of the paper money of Germany and Austria fell to practically nothing, and that of France and Italy was reduced to about one-fifth of what it had been. Of all the European nations Great Britain inflated its currency least and came back to the gold standard first, although in 1931 she again had to abandon it.

The following quotation from a newspaper gives a good example of what may happen during currency inflation:

The extreme to which inflation can be carried, as witnessed in Europe for several years after the war when standard currencies were ridiculously cheapened, is told by Mrs. Irvin J. Rich. . . .

"Traveling from Rome to Vienna in 1925, the customs inspector entered the compartment to inspect our baggage," Mrs. Rich said today. "A doll purchased in Rome at a cost of \$3.50 was found and a duty of 50,000 kronen was placed on it. Before the war a kronen had a value of 20¼ cents in American money, which would have meant a duty of \$10.125. In 1925 the duty of 50,000 kronen, which seemed impossible to pay, as I had no kronen, was settled for 18 lira of Italian money or a value of 72 cents in American money."

Mrs. Rich engaged in a 1,000,000-kronen deal. "The only 1,000,000 deal I ever engaged in was made in Vienna, where I purchased 1,000,000 kronen for \$15," she said. "A bar of chocolate at the depot was purchased for 8,000 kronen. A cab driver with a one-horse carriage charged us 27,000 kronen to ride a mile and a half. Speaking to the director of one of the banks, I learned that a mortgage before the war in the amount of 1,000,000 kronen could be paid off for the price of a good dinner for four people and the security back of this mortgage consisted of a six-story building approximately one block long."¹

Failure of the Attempt to Shift to Germany the Burden of Allied Debts. A nation can depreciate its currency to pay its own subjects;

¹ *Chicago Daily News*, April 25, 1933.

this means simply that the internal creditors are not paid in real value as much as they lent. But a nation cannot settle its international obligations in paper money.

For a long time our European debtors clung to the idea that the money to pay the war debts to us should be taken from Germany in the form of reparation payments. But as time passed it became increasingly clear that Germany could not pay any substantial part of the sum. No one supposed that Germany could pay in gold, for her gold supply was very low and had to be retained at home to give her currency the semblance of stability. Nor could Germany pay by an export surplus, because (1) her economic system had been on the verge of collapse and (2) the trade barriers to which we have referred placed extreme obstacles in her way.

One device by which a partial payment could be secured was by *paying in kind*, that is, by transferring to the Allies goods rather than money. The difficulty with such an arrangement is that the transfer of any large amount of goods from one country to another causes a productive stagnation in the country which accepts them. French, British, and Belgian manufacturers wanted to make and sell goods in so far as they could, rather than have them shipped in free from Germany. Workers felt the same way, for they saw that they would lose their jobs if the factories in which they worked were forced to close. Besides, if Germany's factories and mines were stimulated by purchases by creditor governments, they would soon become prosperous and become dangerous competitors. Accordingly payment in kind was used to only a limited extent.

There is no certainty as to how much of the reparation payments Germany paid before 1929. The likelihood is that they amounted to about \$2,500,000,000. To pay this Germany contracted private international debts of \$3,500,000,000. The problem of reparation payments in 1929 was complicated by the fact that Germany's private debts exceeded \$5,000,000,000. England, having relatively little to gain from reparation payments, wanted the private debts paid first. France, with large reparation rights, desired the reverse policy.

Under the Young Plan, in 1929 Germany agreed to pay somewhat over \$27,000,000,000 by 1988. By the middle of 1931 she had paid only \$684,000,000. By that time the world depression was so severe that President Hoover suggested a one-year moratorium, or suspension, on debts and reparation payments. In 1932 the Lausanne

Agreement practically put an end to German reparation payments, and thus the possibility that our allies would be able to shift their war debts came to an end.

Allies' Debts to the United States. The loans that we made to our allies were funded by various negotiations between 1922 and 1930. The plans that were then adopted provided for completing the payments of both the principal and the interest over a period of sixty-two years. The following figures show the amount of the loans, the funded debt, and the payments through December 15, 1932.

TABLE 40
THE AMERICAN WAR LOANS.

<i>Country</i>	<i>Loans (Billions)</i>	<i>Funded * (Billions)</i>	<i>Repaid by Dec. 15, 1932 (Billions)</i>
Great Britain	\$ 4,277	\$11,105	\$1,912
France	3,405	6,848	486
Italy	1,648	2,408	98
All others	1,008	1,827	132
Total	10,338	22,188	2,628

* The original loans were funded (converted into permanent form), the funded debt to include the principal, and the interest (which is different for different countries), for a period of sixty-two years, with annual payment of one sixty-second of the sum.

From Table 40, we see that only a little more than 10 per cent of the tremendous funded total has been paid.

PRESENT CONTROVERSY OVER THE WAR DEBTS

Defaults. Protest against the war-debt situation took acute form when the time for payment of an installment came at the end of 1932. France defaulted indefinitely, indicating that she would pay no more until the United States reconsidered proposals for revising the terms of the debt agreement. England paid, but implied that she would make no more payments under the present agreement. These drastic actions bring to the front the arguments for and against the revision of the war debts.

Arguments for Revision. The chief arguments of the debtor nations in favor of revision—which of course means reduction—are as follows:

1. The terms of the debts were part of a general scheme presupposing German's ability to make reparation payments to the Allies. The Young Plan linked the two, so did the Hoover moratorium, by implication; the Lausanne Agreement was dependent upon the satisfactory settlement of the debts to the United States.

2. The terms of the debts anticipated a rising level of prices. The actual fall in prices increases the value of the dollar and makes payment in full too severe a task.

3. The terms were based on the respective capacity of various nations to pay. Since the terms were adopted, the capacity of England and France has been reversed.

4. The money was used in a common cause—the winning of the war.

5. If the debts were reduced, the possibilities of purchasing American goods would be so increased that tariffs would be lowered, trade would be stimulated, and the trade profits and customs duties collected here would exceed the amounts canceled.

Arguments against Revision. The arguments against revision take this form:

1. Officially the United States has always insisted that the war debts are separate from the problem of reparation payments.

2. The low interest rates at which the debts were funded amounted to a partial cancellation.

3. A large part of the loans were made after the armistice, and therefore were not for the purpose of helping to win the war.

4. The debtor nations have the capacity to pay, because each of them spends more than the amount of the debt on armaments.

5. The debts are only one-fourth of the foreign purchases from the United States, and therefore do not have much effect upon trade.

6. If the debts are canceled, the United States loses just that amount of money or goods.

Central Problem of Tariffs, Debts, and World Trade. None of the five points made by the debtors constitutes legal ground for abandoning the debts. Their fifth point, however, implying that the debts cannot be collected in full while our tariffs remain as high as they are, is crucial as a matter of sound economic adjustment. The

first three American points, even if true, shed no light on how to deal with the present situation. The fourth point is open to question because armaments are built on domestic credit and we want payment in gold. The fifth and sixth points take issue with the fifth revisionist point concerning the help that revision would give to international trade.

The problem of the war debts requires mutual action. Some revision—possibly the remittance of the interest amounts that entered into the funding agreement—and some scaling-down of tariffs would be helpful. Concessions on both sides are necessary to remove the danger of serious misunderstandings, as well as to win those improvements in our levels of living which are to be had from a smoothly functioning international trade.

HOW IMPORTANT ARE THE TARIFF AND THE WAR DEBTS?

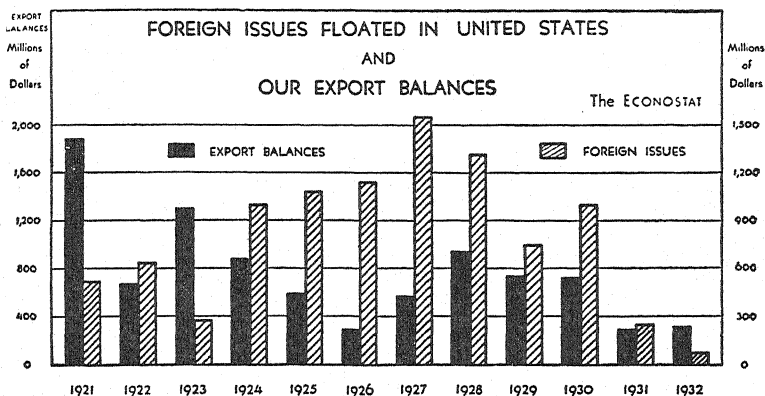
Politics or Economics? Sometimes traditional political ways of thinking linger in our minds long after economic developments raise a new group of problems to primary importance. Today, the maladjustments in our internal economic life are much more important than international questions and call for solution much more insistently than they do. Yet the older problems often occupy the center of the stage and receive the widest popular response. A proper sense of proportion would alter the situation, for at present our national trials are greater than our troubles with international affairs. But we must realize, too, that the latter difficulties have an important effect upon our levels of living—not so much in themselves as in the way in which they may cause strife culminating in war, which is the worst of all economic curses.

SUMMARY

Prosperous countries generally export capital in order to develop foreign markets. The repayment of such loans by means of money, goods, or services is a source of constant friction among nations. More serious trouble is caused by international rivalry for markets and by strong-arm methods of governments in pushing the interests of their own subjects. When such difficulties reach a crisis, war bursts forth as the most severe tax upon the economic well-being of the

entire world. Capital exports must be coördinated with domestic economic activity so as to secure the maximum national well-being with the minimum risks of strife. This raises the problem of controlling the profit-seeking activities of individual business men.

The most important source of international friction today is the war debts. During the World War the United States lent huge sums



This chart shows how the attempt to maintain our export balance by means of huge foreign loans alone was doomed to failure.

to the Allies in order that they might buy our munitions and foods. The Allies met their internal obligations by currency inflation, but they have found no way to pay us. The attempt to wring the total debt from Germany was doomed to failure. In 1932 the Allies indicated that they would make no more payments to us until debt revision takes place. Out of the maze of arguments for and against revision, the outstanding issue appears to be one of settling debts, tariffs, and world trade by mutual concessions. If we neither reduce the debts nor lower our bars against foreign goods, we cannot hope to maintain our markets abroad.

How important is world trade to us? We must remember that traditional political issues lag behind economic development, and that the task of internal reconstruction is our most important problem. World trade and debt collection are not vital, but world accord is. Such accord can be secured only by a solution of the debt and trade problems that will embrace the broader economic issues which are involved.

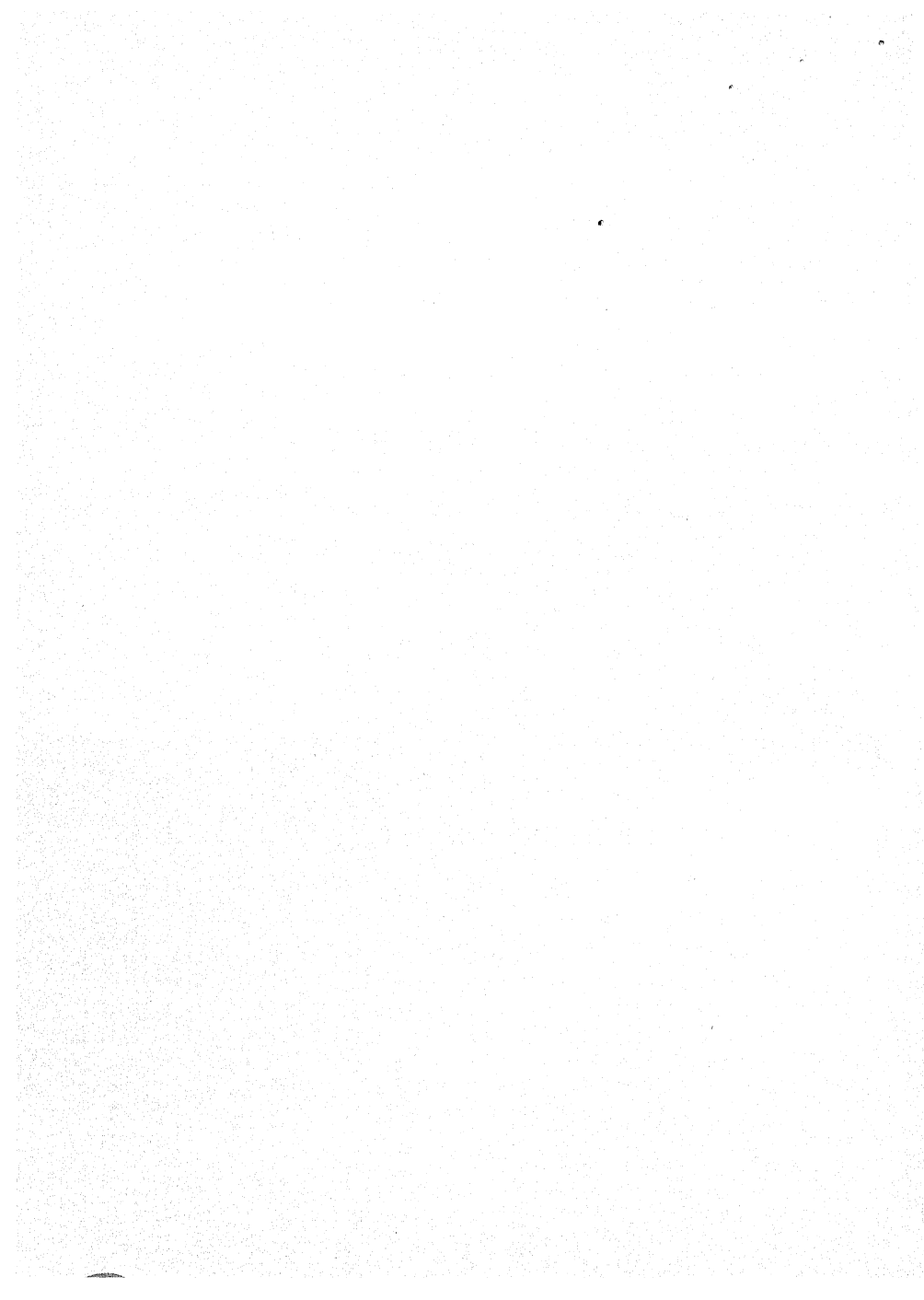
QUESTIONS AND PROBLEMS

1. What kinds of nations import capital? What kinds export capital? Illustrate your answer (1) by citing the practices of various countries today and (2) by tracing changes at different periods in the practice of the United States.
2. How may rivalry for investment markets lead to war?
3. What do we mean when we say that it makes little difference whether the urge to develop new areas arises in governments or in their nationals? What differences might it make?
4. What is the connection between domestic coördination, as we have discussed it in previous chapters, and the export of capital?
5. In what sense may the export of capital represent a clash of group interests within a nation as well as a clash of international interests?
6. In a perfectly coördinated domestic economy, would it be wise to export capital at all? Give reasons.
7. *Reports for volunteers:*
 - a. The Washington Limitation of Arms Conference of 1922
 - b. The London Conference of 1930
 - c. The Geneva Conference of 1932
 - d. The World Court
 - e. The London Economic Conference of 1933.
8. How did the United States become a great creditor nation?
9. Tell why the war debts cannot be paid by currency inflation. Why cannot they be paid by shipments of gold?
10. Why could not the war debts be shifted to Germany? What is the present state of German reparation payments?
11. Outline the extent and distribution of the war debts, the funding agreement, and the repayments to date.
12. Have the war debts been repudiated? What is the main issue in connection with these debts?
13. Give as many reasons as occur to you to explain why political issues lag behind and tend to obscure economic issues.

READINGS IN THE CLASS LIBRARY

1. "America and European Competitors," W. E. Weyl, Hart, *Twentieth Century United States*, pp. 193-97.
2. "Post-War Reparations," A. A. Young, *ibid.*, pp. 885-89.
3. "Two Views of the Tariff," Henry Clay and Daniel Webster, Forman, *Sidelights on Our Social and Economic History*, pp. 130-37.
4. "The Two-Hour War," Chase, *Men and Machines*, pp. 307-17.

5. "The Problem of a Protective Tariff," Patterson and Scholz, *Economic Problems of Modern Life*, pp. 332-51.
6. "The 'American System,'" Henry Clay, Bogart and Thompson, *Readings in the Economic History of the United States*, pp. 313-16.
7. "Memorial on Free Trade," Albert Gallatin, *ibid.*, pp. 321-23.
8. "The Armament Industry and War," Wells, *The Work, Wealth and Happiness of Mankind*, Vol. II, pp. 673-81.
9. "The Chinese Tariff," R. T. Rich, Weld and Tostlebe, *A Case Book for Economics*, pp. 334-35.
10. "An Amateur Rug Merchant," *ibid.*, p. 336.
11. "The Tariff and the High Price of Lead," A. B. Raymond, *ibid.*, pp. 342-48.



Part Eight

RAISING THE LEVELS OF LIVING BY CONSIDERING ALTERNATIVES TO LAISSEZ FAIRE

Looking Backward—and Forward

A SUMMARY of the internal aspects of American economic life appears on page 457. Part Seven, which has just been studied, provides an account of the rôle of the United States in international economics.

The United States profits greatly by international trade. The serious decline which set in during the early nineteen-thirties was

LOOKING BACKWARD—AND FORWARD

influenced in part by a disturbance of international trade relations and by our tariff policy. The practice of restrictive barriers against imports, coupled with the effort to sell goods abroad and to lend other nations money with which to buy these goods, cannot be continued indefinitely. We must choose either to buy abroad or to witness a constant decline in our international trade.

The problem of economic conflict among nations is vital, for such strife repeatedly leads to war, which is the greatest economic waste known to civilization. Capital export must be coördinated with national welfare, rather than left to the complete control of men dominated by the profit motive. The war debts, which are inextricably interwoven with our tariff policy and the illusory attempt to secure a so-called favorable balance of trade, must be also cleared up.

Our study of American economic society and its problems draws to a close. Why did we make this study? Surely not to gain "knowledge for its own sake." We sought to understand our economic life in order to be better fitted to improve our lot, to raise our levels of living. Our analysis has shown the weaknesses of our system and we must now consider ways of remedying them. One alternative is *laissez faire*—let things alone! But when things are "let alone" they go awry. This book would be lacking indeed, if after pointing out defects and suggesting remedies, it concluded with the statement, "Let's not do anything." But what can be done? In Part Eight we shall consider alternatives to *laissez faire* and attempt to evaluate them in the light of what we have learned about the workings of our complex economic society.

Chapter 27

LAISSEZ FAIRE VERSUS SOCIAL CONTROL

DEVELOPMENT OF LAISSEZ FAIRE IN THE NINETEENTH CENTURY

Philosophy of Laissez Faire. The doctrine of laissez faire proposes that the individuals in society should be free to engage in economic activity without being restrained by law or some other form of social control. Believers in laissez faire argue that freedom of action and individual initiative will bring "the greatest good of the greatest number" and will secure the highest levels of living possible.

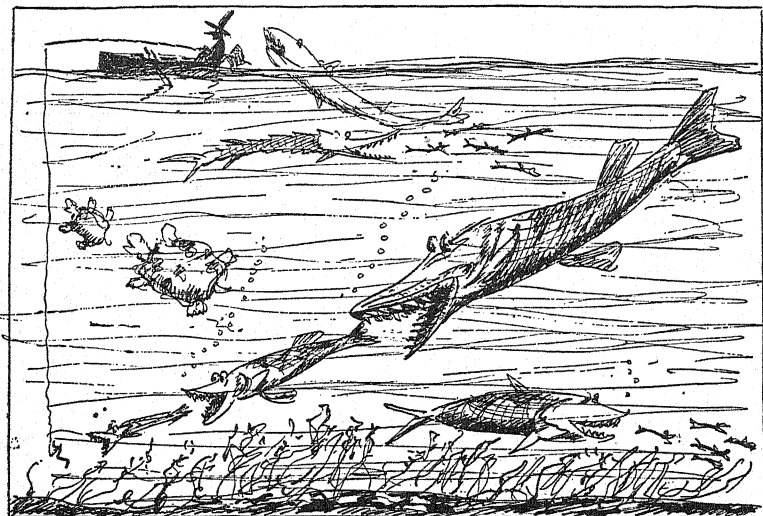
Laissez Faire and Individualism. *Individualism* has many meanings, according to the way in which it is used. When the word is used to describe an economic philosophy, it implies the acceptance of the ideas of laissez faire. Accordingly we may use *laissez faire* and *individualism* interchangeably in this chapter.

Laissez Faire as a Remedy for Irksome Restrictions. As pointed out in Chapter II, the irksome restrictions of the guilds hampered the development of a new type of industry. Regulations that had been useful during the guild era proved harmful when the guilds declined. As a result strong governments swept away the medieval regulations and set up new codes under the mercantile system, in order to place industry under efficient managers, to coördinate national finances, to rid the seas of pirates, and to conduct exploration and colonization in the new lands to the west.

But in the nineteenth century the industrial system underwent such rapid changes that the restrictions of the mercantile system became outmoded almost at once. The progress of the factory system therefore led to a new cry for freedom from government restrictions.

Economists like Adam Smith set forth theories based upon the needs of the times, and developed the idea of laissez faire into a noble system, which soon won the support of business men and of governments.

Laissez Faire Suitable to the Pioneer Life of the Nineteenth Century. In our own country the problem of the last century was to



The little fish in this picture may be enjoying its freedom and may feel that it has the whole sea and a nice worm all to itself. But its future is not so roseate as it suspects. ("Laissez faire," by H. W. Van Loon in *The Survey Graphic*, December 1, 1932.)

transform a wild and fertile continent into a great productive country. Enterprise and daring were in demand. We can picture the Western pioneer, driving his wagon toward the Rockies, prospecting, fighting Indians, starting a settlement, maintaining law and order by the use of his rifle. No one would claim that such men, scattered over the great plains, could be subjected to a high degree of social control. For the building of the country a rugged individualism was the first prerequisite and the policy of laissez faire was a necessity.

Laissez Faire Suitable to the Business Life of the Nineteenth Century. Laissez faire also met the needs of business and community life. Economic enterprises were on a small scale but entirely adequate

for the needs of the localities clustered about them. Since industry was decentralized, a high degree of social control was difficult, if not impossible. Since there was relatively little interdependence, the fate or policies of a particular activity or enterprise had few social consequences. Laissez-faire was not merely good; it was the only possible course.

Basis of Laissez Faire. Individualism is not a religion. It is not necessarily good in itself. But it is probably the best policy to follow under certain economic and social conditions. Such conditions in the United States in the nineteenth century made laissez faire a policy of wisdom, because it aided the economic development of the country. Does it do so today? The same test of utility must be met if the doctrine of laissez faire is to be continued.

INADEQUACY OF LAISSEZ FAIRE IN THE TWENTIETH CENTURY

Laissez Faire and the Economic Structure of Today. Today, as we have seen, the growth of the size of business units has progressed to the point where most of our vital industries are in the hands of tremendous corporations, each of which is of national significance. This unification makes social control possible. It also makes control necessary, because business is so huge and so interdependent that every action it takes is fraught with deep social implications. The problem, therefore, is simply to vary our ideas as conditions change. Individualism in the old sense has disappeared from business on the technological and management side. Will it also cease to exert so powerful an influence upon social thinking and upon business problems?

Individualism as a Motivating Force. The great need during the past century was to foster the pioneer development of the country. Unrestrained individualism was a desirable course, but it developed conditions that are not satisfactory when social needs change. Today our primary need is not to stimulate enterprise, but to order and plan it in the public interest. How unsuited to this purpose the individualistic motive proves to be is shown by the following description:

This self-reliant, aggressive individualism exemplified by the pioneer, also characterized the factory builder, town-boomer, merchant prince, railroad promoter and that long line of political, industrial, and financial buccaneers who dominated America after the Civil War. The quest for money



"With their hands they have builded great cities and they cannot be sure of a roof over their own heads."—Helen Keller. (Drawn by Franklin Booth for *The Unemployed*, February, 1931.)

and economic power overshadowed all else. Although not without humanitarian sentiments many persons in their desire to achieve social-economic success were tolerant or indifferent to the evils of *laissez-faire*. Men winked at slavery, slums, piratical business, and political corruption. The dollar rather than educational fitness for social service was the standard by which the individual measured his success. In fact the possession of money or its equivalent was *prima facie* evidence of a man's usefulness to society. Indeed it was the craze for money—for the almighty dollar—that made America a nation of preemptions and exploiters and that led Americans to raise one crop, work one vein, cut the best trees, work children long hours, and turn day into night, and night into day. We were not thorough because it did not pay to be thorough. We did not plan for the future because we did not have to. We lived in the dominion of the immediate where individualism reigned almost supreme.¹

Laissez Faire and Government. One reason why *laissez faire* was necessary in the nineteenth century was that economic affairs changed too rapidly and became too complex to be handled by the governments of those times. The techniques of control lagged behind the techniques of production. Now, however, we have developed efficiency and science in the art of government. Our administrative, executive, and judicial bodies have proved competent to handle the most difficult matters. As we shall see, other countries have proved the practicability of a high degree of social control. No longer can people claim with truth that it is impossible to substitute alternatives for *laissez faire*.

TRUE MEANING OF LAISSEZ FAIRE TODAY

Liberty in the Modern State. On the surface, *laissez faire* seems to promote liberty, and many people defend it on this ground. But we must analyze more closely the meaning and scope of liberty in modern society. Every law, every custom, every practice that is sanctioned by public opinion, restricts freedom in some way. Automobile regulations curtail our freedom to speed, but increase our freedom from careless drivers. If the speed law were revoked, it would increase our freedom to drive rapidly, but decrease as rapidly our freedom from danger. The question is simply which freedom we prefer. Absolute liberty in society is impossible, and the drama of civilization is a constant reconciliation among various interests in freedom.

¹ H. J. Carman, in the Introduction to his *Principles of Social Legislation*, Macmillan Company. Quoted by permission of the publishers.

Like every other policy, laissez faire selects certain freedoms at the expense of others. By allowing greater freedom to business, it curtails the freedom of those who deal with business. A splendid example of this is found in the doctrine of *liberty of contract*. Our federal Constitution was written in a laissez-faire age, and one of its provisions is that there shall be freedom of contract. The courts have interpreted this to mean that laws which require employers to deal with *groups* of workers rather than with *individuals* concerning terms of employment are unconstitutional, on the ground that the employer has the liberty to contract with whomever he selects. But many people have pointed out that the worker has no real freedom of contract until he can bargain in unison with other workers, for otherwise the employer has so much economic power that an individual worker is at a fatal disadvantage. Thus we see again how one type of freedom restricts another.

Laissez Faire and Freedom of Business Enterprise. When we examine laissez faire, we see that the particular freedom which it stresses is the freedom of business enterprise to do as it chooses. Liberty of contract is one example, but there are innumerable others. The freedom of business to charge high prices is protected against the freedom of legislatures to protect consumers by establishing prices, except for public utilities. The freedom of business to pay starvation wages is protected against the freedom of legislatures to enact minimum-wage laws.

The very businesses which protest against government control and appeal to the ideals of individualism, again and again plead for control in their own interests. Tariff laws protecting industry are similar in principle to laws protecting wages, but the former and not the latter have been sanctioned by advocates of the doctrine of laissez faire. The freedom of business enterprise is valued above other freedoms because in the nineteenth century that was the type of liberty which society needed most. Today, since other types of liberty have become more important, we must abandon laissez faire.

SUBSTITUTION OF SOCIAL CONTROL FOR THE FREEDOM OF BUSINESS ENTERPRISE

Recent Confidence in Free Enterprise. The material progress that accompanied the conquering of the American continent, and which characterized in high degree the period from 1922 to 1929,

established beliefs that until recently remained unchallenged. The common people came to believe that laissez faire and rugged individualism insured the maximum production of goods, and that the in-



This man is likely to wait a long time, but at least he has a warm coat and a big cigar. What about those who wait in rags and hunger?

creased productivity of the machine for business success would disperse leisure and comfort throughout society.

While the machines were running at top speed, it was difficult to gain attention by stating that measured in terms of social justice we were making poor use of our wealth. Those who were profiting by laissez faire of course did not protest. Those who were not faring so well thought that the system offered fabulous prospects to the worthy, and remained acquiescent. Unbiased economists, however, had their

misgivings. But so long as poverty was decreasing, the general public believed that material success was assured.

Rude Awakening. But with the coming of the nineteen-thirties the machine broke down. And serious-minded people have wondered why the collapse was not more complete, for the depression showed that we have set up almost no social controls to cope with the problems of our age. Increasingly the need for a more adequate sort of social control to replace laissez faire has become apparent.

Obstacles to Social Control. During recent years we have become more and more aware that we live in a world of change. We are not so conscious, perhaps, that certain elements in our social situation which have not changed constitute the greatest barrier to economic recovery. Danger does not lie necessarily in change, but in the premature fixation of ideas. We have inherited a cultural and economic pattern which reflects the needs and aspirations of a nation in the first stages of industrialism, or of a pioneer people pushing its frontiers into the wilderness. Today individualism and laissez faire have lost their setting, and cannot be applied to present-day social and economic problems.

How Much Social Control Is Needed? No one can say just what line must be drawn between individualism and social control. People want different things, and even if they agreed on their desires they would disagree as to the best means of attainment. But they all want to raise their levels of living. Although we cannot hope to settle the problems of economic life, we can explore the main plans for social control and economic readjustment that have been proposed.

SUMMARY

The philosophy of laissez faire is that freedom from government restrictions and regulations is a guarantee of a successful economy. This theory worked well in our country in the nineteenth century, when the chief economic need was the rapid development of our resources and when economic enterprises were in the hands of small adventurers, business men, and farmers. In our own times, with business organized on a huge scale and burdened with great social responsibilities, the need for public control is predominant. Our task has turned from exploiting natural resources to organizing business in the public interest; individualism does not supply proper incentives or agencies for this task.

When we examine *laissez faire*, we see that it does not mean complete or absolute liberty. Freedom and restraint must be reconciled in the modern state, as in any state. *Laissez faire*, which developed when the greatest need was for freedom of business enterprise, stresses the liberty of business at the expense of other kinds of liberty. Now other liberties are of greater importance, and can be secured only by social control.

The substitution of social control for *laissez faire* depends upon the surrendering of beliefs that do not fit into modern society. We have already enlarged the scope of social control, but greater extension seems desirable if economic needs are to be met.

QUESTIONS AND PROBLEMS

1. In what respects was *laissez faire* suitable to the United States in the nineteenth century? Do you think a greater degree of social control than existed at that time would have been a better policy? Is there any way of telling?
2. What is meant by the statement that individualism is disappearing on the technological side?
3. In what phases of American economic activity do we find the greatest amount of individualism? Why?
4. Name several incentives for work. Can social control substitute social objectives for personal incentives? Illustrate your answer.
5. Prepare a list of the instances of social control in the United States that have been described in this book.
6. What is meant by *ordered liberty*? Give instances (not contained in this chapter) of the reconciliation of conflicting liberties.
7. How does the principle of *laissez faire* favor free business enterprise over other types of freedom?
8. Mention instances in which business interests favor the renunciation of the policy of *laissez faire*.
9. What seems to be the chief obstacle to the extension of social control? Suggest ways by which the obstacle you name might be removed.

Chapter 28

ECONOMIC PLANNING IN THE UNION OF SOVIET SOCIALIST REPUBLICS

SOCIALISM AND COMMUNISM

Socialism. Socialism has had a long history, during which many varieties of socialism have appeared. But despite the variations there has been a common theme which persists today. The main principles of socialism are as follows:

1. The chief instrumentalities for the production of wealth should be owned and controlled by society rather than by individuals, and should be administered so as to further social well-being rather than to make profits.
2. Every person should contribute to economic activity according to his ability, and every person should be rewarded according to his needs. This means that the private accumulation of great wealth would be impossible, and that democracy would prevail in the control of economic activity.
3. Classes (workers, owners, et cetera) are based primarily upon economic inequality. With the abolition of economic inequality there would result a classless society or a "common brotherhood of man."
4. A society organized on socialistic principles would be more productive than a capitalistic society, and the increased productivity coupled with successful coördination under public ownership would result in the abolition of poverty and in comfortable levels of living for everyone, at least in highly industrialized and wealthy nations.

Socialism offers two ideas of chief interest to us. First, it contains a fairly definite set of social goals. Second, it advocates economic planning on the widest possible scale. In the last respect it is of necessity the exact opposite of *laissez faire*, for if all business is socially

owned, society must plan for its success just as under capitalism the directors of a corporation must plan for the success of the corporation.

Communism. As a theory communism is older than Plato's *Republic*. Like other forms of socialism, it has existed in many forms and undergone many transformations. Today, socialists and communists agree substantially as to the type of society they want. But they differ as to the methods by which capitalistic society may be transformed into socialistic society. Communists say that the only one way to accomplish this end is by the *class struggle*, that the proletariat ¹ (in the narrower sense of the urban industrial worker) must become conscious that his interests are different from those of the employers, must overthrow capitalistic society, by force or otherwise, and set up a dictatorship of the proletariat. Under this dictatorship economic society would become socialized. Once socialization is completed and classes disappear, the dictatorship by the working classes would give way to industrial democracy, because everyone would become a worker, and the classless society become an actuality.

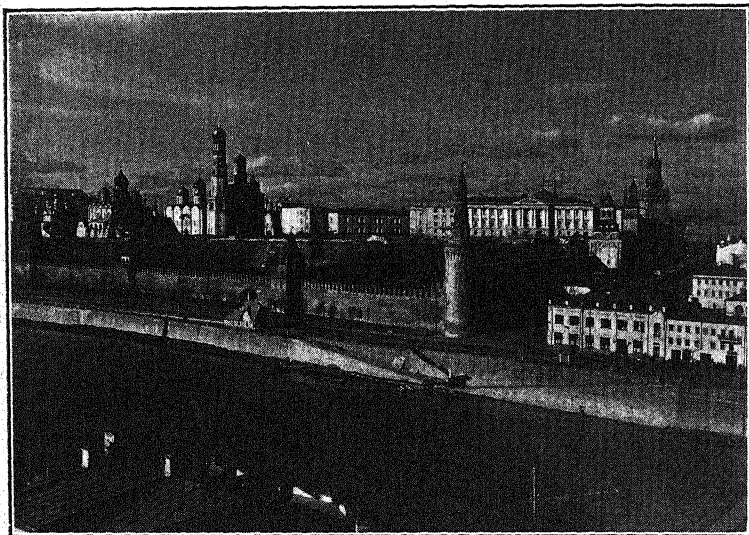
Russian Experiment. For at least a century social theorists have been seriously hampered whenever they have considered socialism or communism. In the first place, socialism could not be set up in a laboratory, and therefore there was no way to observe how it would work. In the second place, theoretical discussions about the inevitability of socialism or the inevitability of a particular historic process from capitalism to socialism (the class struggle) were fruitless. The debaters almost always forgot that the change awaited the time when the people who wanted socialism should obtain sufficient power to establish it, and that no one could predict when enough people would want it badly enough to work and struggle for it.

Today we are more fortunate. In Soviet Russia we may study a country of 160,000,000 people, covering one-seventh of the earth's surface, which has established by communist methods the system and the goals of socialism, and which is now in the second decade of the new plan. The transition from capitalism to socialism took place through a revolution backed by the proletariat. At present socialism is maintained by a forceful dictatorship of the proletariat under

¹ *Proletariat* means the class; *proletarian* means the type. Thus "proletarian backers," but "the revolution was backed by the proletariat."

the leadership of the Communist party. The processes of socialization and of abolishing class distinctions are going on all the time. The proletarian backers of the Communist party are still a small fraction of the total population.

Twenty-five years ago the idea of such a perfect set-up for study would have seemed a dream to the social scientist. Today we may



Kremlin, seat of the Soviet Government, from the Moscow River.
(A Margaret Bourke-White Photo.)

examine the Russian situation in the following ways: (1) the technique of social planning in Russia; (2) the objectives of social planning in Russia; (3) the results of social planning in Russia; and (4) the significance of social planning in Russia so far as we are concerned.

The account we give here of Soviet Russia is up to date as far as we can make it so, but it must always be remembered that the theory of the Communist party is that changes must be made whenever the situation seems to call for them. Not only have many and important changes been made already, but changes also occur almost from day to day.

TECHNIQUE OF SOCIAL PLANNING IN RUSSIAN INDUSTRY

Combination as a Coördinator within a Single Industry. The factories in Russia are grouped into a number of trusts, and all the trusts in a single industry are controlled by a combination. The combination serves as a planning and coördinating agency for all the trusts under its supervision in the following manner:

1. The combination works out for each trust the kinds and quantities of goods that the trust is to produce, and the time schedules upon which it is to work.
2. The combination controls the distribution of credit among trusts and factories, and thus regulates the scope of their operations.
3. The combination sets upper and lower limits to the wage agreements made between the trusts and the trade unions.
4. The combination controls the supply of raw materials for each trust.
5. The combination is the point of contact between its industry and the outside world, and makes all the contracts with other industries.
6. The combination appoints the directors of the trusts and the trusts appoint the directors of the factories.

Such is the mechanism for coördinating the processes of a single industry. At the same time, a large degree of local autonomy remains. The trusts may carry on some buying and selling without consulting the combination. The factory may hire and fire workers without consulting the combination.

Supreme Economic Council as a Coördinator of Various Industries. Just as the combination regulates a single industry, the Supreme Economic Council coördinates all the industries of the Russian economic society. The combinations are departments of the Supreme Economic Council, which unites all industries in a single planning agency. The functions of the council are as follows:

1. It holds periodic industrial congresses to coördinate the activities of various industries.
2. The council controls the distribution of the profits and losses of the combinations, trusts, and factories. It also regulates prices, particularly the prices of goods sold by one industry to another. Such powers are most important. By taking the profits of one industry and devoting them to another,

the council can equalize wages and can cause the expansion or contraction of any industry as it sees fit.

3. It regulates capital construction and technical reconstruction, that is, it determines which industries shall build up surplus funds and which shall install new plant equipment.

4. It appoints the directors of the combinations.

5. It has a Department of Technical Economic Planning which works out general plans for all industry, draws up control figures for various industries, coordinates industrial activity, works out industrial policy, initiates industrial legislation, and engages in scientific research.



Designing uniforms for soldiers at the Style Institute, Moscow. (A Margaret Bourke-White Photo.)

Complete Process of Industrial Planning. Let us see just how a plan is worked out. The trusts and factories in each industry send to the combination complete reports concerning such matters as their past accomplishments, capacity,

and workers. All of the combinations forward the reports and plans to the Supreme Economic Council. The Council passes along the plans of all industries to the Gosplan (State Planning Commission), which coordinates the industrial plans with those of agriculture, banking, and commerce. At each higher stage the plans are revised

to satisfy broader social needs. The plans then go from the Gosplan back to the lower groups; each of the lower groups may object to the modifications and try to secure revisions. Finally, the plans are adopted. Each unit is responsible for carrying out its assignment, but the final responsibility for each industry lies with the combinations.

Nature of the Supreme Economic Councils. There is a Supreme Economic Council for the Soviet Union, one for each of the seven republics of the Union, and one for each local division. Combinations are grouped under the jurisdiction of one or another type of council (soviet), depending upon whether the industries involved are of union, republic, or local significance. All of the councils are People's Commissariats; they deal only with state-owned industries and resources, which have been completely socialized. Therefore, our description thus far has been of state industry only. But Russia also contains several producers' coöperatives and there is some private business.

Producers' Coöperatives. Of the less than 5,000,000 small-scale producers in Russia who do not belong to state industries, probably four-fifths belong to the producers' coöperatives, the *artels*. In 1930 the artels produced about one-tenth of the national total, and about 30 per cent of the total in light industries. In many instances the artel members carry on their activities at home, the coöperatives existing for the purposes of buying raw materials and marketing.

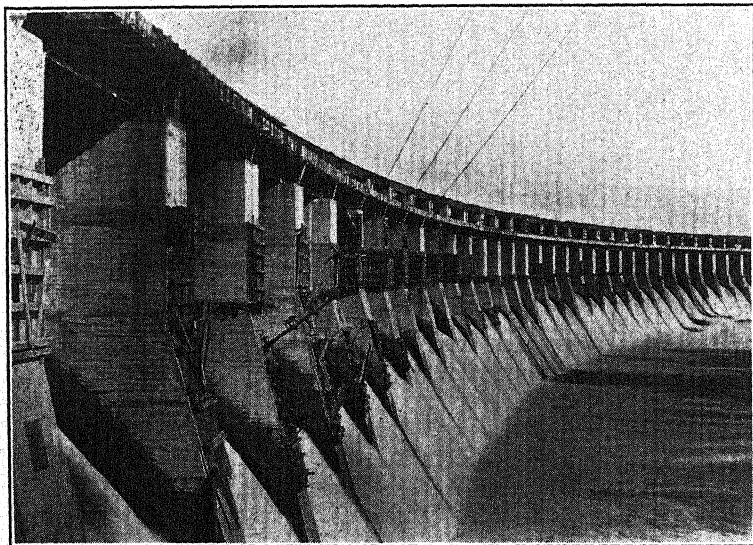
Unlike other coöperative movements the artel does not exist to make profits for its members. It is a definite part of the general national plan and exists only to do work which state industry is not prepared to undertake. The members must buy and sell through the artels, and not on the private market. The artels must trade only with state industry and with other coöperative associations. All of the artels are under the All-Union Council of Artels. Price-fixing, wage regulation, and subsidies make the essential distinction between the artels and state industry very slight.

Private Industry in Russia. Purely private enterprise in Russia is very slight. Regulations forbidding the private employment of laborers make private manufacturing impossible. The amount of manufacturing done by foreign concessionaires is limited and on the decline. There remain many technical-aid contracts which enlist the services of foreign engineers, contractors, and other special-

ists. The natural tendency would be for these to decline. Individual business remains in the hands of numerous artisans, but they are gradually being forced into the *artels*.

THE OBJECTIVES OF SOCIAL PLANNING IN RUSSIAN INDUSTRY

Planning and Objectives. As pointed out at the beginning of the chapter, socialism involves both planning economic activities *and* achieving definite social goals. Having described the technique of



The Dam Dniestro, built under the direction of Colonel Hugh L. Cooper, prominent American engineer. (A Margaret Bourke-White Photo.)

planning in Russia, we shall now consider what Soviet Russia is doing to achieve the main goals of socialism, namely: (1) the operation of businesses in the public interest rather than for profits, (2) the equalization of incomes, and (3) the control of business by the workers. Raising levels of living is not a peculiar goal of socialism, but rather a claim made by socialists for their system, just as capitalists make the same claim for capitalism. We must therefore post-

pone until a later section the question of whether the Russian plan has raised, or is likely to raise, levels of living.

Operation of Industry in the Public Interest Rather Than for Profits. Many people would say—and they may be correct—that it is for the best interest of the public to operate business directly for profits. Others would say that, even when the public interest is the main motive of production, those in control may make mistakes of judgment as to what is best for the public. Certainly Russia has made mistakes of the sort. Therefore what we mean to say here is simply that Russia is trying to operate industry directly in the public interest, and has largely eliminated private business, which, with all its virtues, is dominated by the motive of private gain.

Abolition of Private Profits. Russian industry is not organized for private profits. State control of prices and subsidies makes industries profitable or unprofitable, and thus directs their expansion or contraction, according to supposed social needs. Of the profits made by a state trust (1) 47.5 per cent go to the state treasury, (2) 3.5 per cent are set aside for vocational or technical education, (3) 11.5 per cent are paid into a fund for improving the living-conditions of the workers, (4) 25 per cent go to the special capital of the central bank, and (5) 12.5 per cent are retained for capital expansion.

Thus if a business shows a money profit, over 70 per cent of it is taken by the state and devoted to whatever purposes the state decides. The remainder goes to the workers and to improvements. By price-fixing the state determines whether an industry is to make any profits at all. On the whole, then, Russian industry is "operated in the public interest," as we commonly understand the expression.

Equalization of Incomes. In Russian industry the objective "to each according to his needs" has been attained fairly well. Directors or managers receive somewhat higher salaries than workers, and in addition they have better living-quarters, better transportation facilities, and somewhat better food under the rationing system. Workers, too, receive gradations in pay according to the quality of their services. But, in contrast to capitalistic countries, there are no glaring inequalities among individuals, either in the same industry or in different industries; there are no rich men; and there is a strong tendency toward even greater equalization.

Social Insurance. Wages provide for those who are at work; social insurance cares for those who are unable to work. Comprehensive provisions for such insurance take the following forms.

1. A worker who is ill receives full pay. It is interesting to note that this does not seem to have caused any malingering.

2. Private medical practice has been eliminated in the cities and will eventually be terminated in the rural areas; public free medical and hospital service has been substituted.

3. Incapacity-for-work insurance pays benefits not only to those totally unfit to work, but also to those who are forced by illness to take jobs at lower pay than their old positions.

4. Insurance is provided for unemployment and old age. All insurance expenses are carried by employers in proportion to their ability to pay. This is another method by which social insurance is used as a means of equalizing incomes.

New Incentives to Industry. An outstanding theoretical challenge to socialism has been that the abolition of the profit motive would reduce economic productivity. It is too early to determine whether this criticism is supported by Russian experience, but so far there is little evidence that Russian industry is suffering from a surplus of indifferent workers. But what will happen when and if the new incentives set up by Russian leaders wear off remains to be seen. All we can do is to describe the new incentives and leave an estimate of their value to the student. The chief incentives to work are:

1. The worker is constantly urged that since he receives the whole product of his labor, he benefits more than he would in any other country by an increase in total national production. It has not been difficult to build enthusiasm around this argument, especially when it is coupled with an urge to surpass capitalist countries where the worker is being "exploited."

2. There are slight gradations in pay, and it is claimed that these serve as well as the chance of huge gain to quicken and sharpen activity.

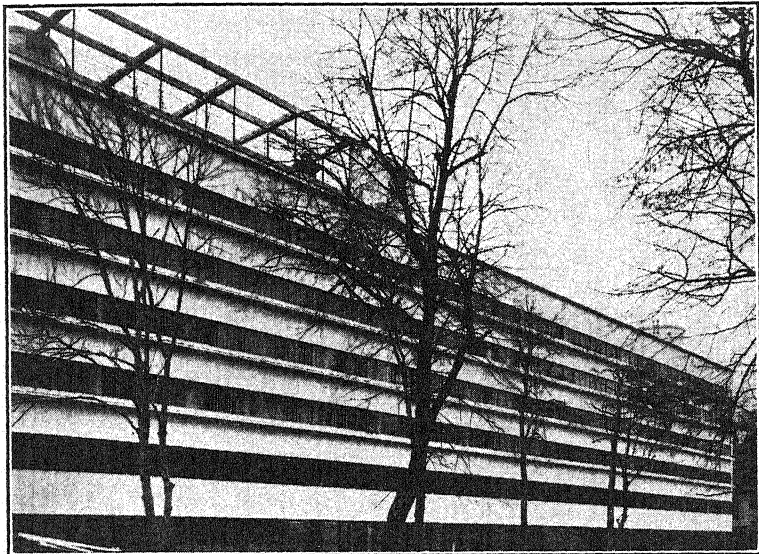
3. *Socialistic competition* between factories, to see which can finish its schedule more rapidly, is fostered.

4. *Shock brigades* of workers are formed to attempt to break former production records.

5. *Public towing* is a process whereby experienced workers from fast plants go over to slower units and attempt to accelerate production.

All of these devices are really similar. The question is whether co-operative effort for a common end calls forth as fine a type of human effort as the constant competitive struggle with its greater emphasis upon individual rewards.

Control of Industry by the Workers. The final objective of Soviet Russia to be considered here is the control of industry by the workers.



Apartment house for employees of Narkomfin (Finance Department) Moscow. (A Margaret Bourke-White Photo.)

Some people would say that so long as industry is operated for the benefit of all, it is just as well that control be in the hands of a beneficent despot. The socialist answer is, first, that participation in industrial control is a worth-while experience in itself, and second, that when control is concentrated in the hands of a few, the few are bound to abuse their power sooner or later.

The factory managers in Russian state industry are appointed by the trusts and confirmed by the Supreme Economic Councils. The needs of efficiency have promoted a constant strengthening of the hand of the managers at the expense of the workmen. But elaborate

labor-protective codes have been worked out. The trade unions may protest the appointment of any manager. It is very difficult to dismiss a worker, and a Conflict Commission is set up in every factory to settle disputes between management and labor. There is a People's Commissariat of Workers and Peasants Inspection, before which all officers must appear to be "cleaned," or subjected to criticism by all the workers. Such criticism is actively stimulated. Workers' brigades are privileged to make inspections and inquiries at all banks, factories, and stores.

There is no fundamental conflict between management and labor such as often occurs in other countries. The triangle of control in the Soviet factory consists of the management, the party cell (the members of the Communist party in the factory), and the factory committee, most of whom are trade union members. The manager is always a Communist party worker and is frequently a trade-union leader. The trade unions are dominated by the Communist party, just as the Government is. The party cell rules the factory committee by the use of the caucus. Thus there is always a united front on any matter involving the general plan of the party, and as the plan at present aims to increase production even at the expense of the workers, all hands are tied to that policy. Thus a small minority dominates industry and, as we shall soon see, all other economic activities as well.

THE TECHNIQUE AND OBJECTIVES OF PLANNING IN RUSSIAN TRADE AND BANKING

Commissariats of Trade. As we have seen, the Supreme Economic Councils are concerned primarily with the control and direction of industrial production. The Commissariats of Trade perform similar functions for commerce. They are organized on a Union, republic, or local basis, and plan the activities of subsidiary combinations and trusts. Their chief functions are (1) to direct and plan the food industry and distribute food over the Union, (2) to direct the interchange of products between state industry and state agriculture (which will be discussed shortly), and (3) to exercise some control over the various coöperatives.

Commissariats of Trade and the Coöperatives. The system of Commissariats of Trade is a state system and is at the head of state

activity. Nevertheless it is expanding its authority over the coöperatives in order to make them completely subsidiary to the state. The most important of all coöperatives are the consumers' coöperatives, which carry on the vast bulk of the retail trade of the Soviet Union and to which most people belong. These organizations can buy only from the state combinations and trusts and can sell only to members. Membership is restricted to those against whom the Government has no special grievance. Prices are controlled by the Commissariats of Trade, and goods are sold as cheaply as possible. Here again the state control is practically absolute, and the internal management is dominated by the Communist party.

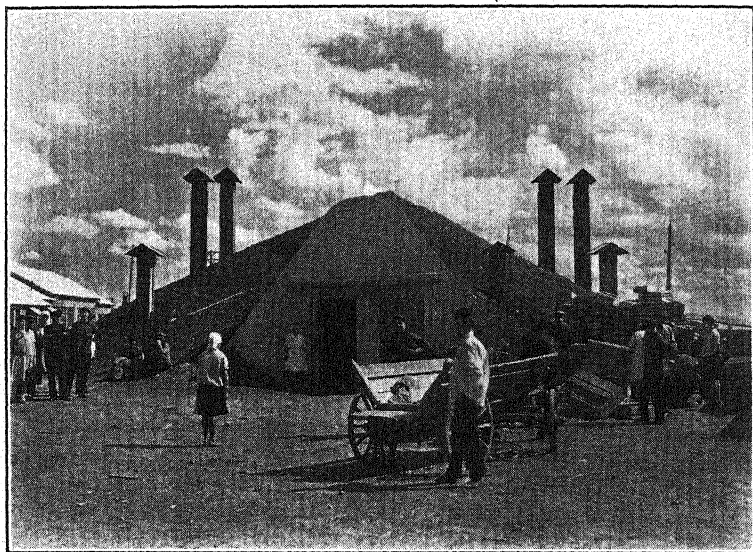
Private internal trade is negligible, and foreign trade is a state matter under the control of the Commissariat of Trade for the Soviet Union.

Banking System. At the head of the state banking system is the State Bank, which has a Statistical and Planning Section closely connected with the State Planning Commission (the Gosplan). The bank is also closely connected with the Supreme Economic Council for the Union, the Commissariat of Trade for the Union, and other planning agencies. Thus the crediting activities of the bank are based upon the plans worked out by the Gosplan, and these plans in turn are based partly upon information supplied by the bank. In this manner, there is coördination between banking and other economic activities, and credit is extended in accordance with a coördinated plan for national well-being. Any trust or combination that is refused the credit it desires may protest to its Supreme Economic Council or Commissariat of Trade, which in turn may uphold the bank or appeal to the Gosplan. Although private banks exist, they are unimportant because of the small amount of private business.

THE TECHNIQUE AND OBJECTIVES OF PLANNING IN RUSSIAN AGRICULTURE

Private Property in Land. The Russian Revolution was a proletarian triumph, and the Soviet aim to nationalize the land has not been accomplished as yet. The astute party leaders realized that it would be folly to attempt to take the land away from the peasantry at once. Accordingly, when the land was taken from the rich proprietors it was divided among the peasants according to their family

needs. In addition, the peasants were allowed to hire labor, to rent land, and to sell their surpluses on the private markets, activities which are contrary to the principles of the party. In this way there naturally grew up a class of very poor farmers, and some well-to-do



A store house at State Farm No. 2 in Soviet Russia. (A Margaret Bourke-White Photo.)

farmers who had been more successful profit-seekers than their neighbors.

Movement to Nationalize the Land. The splitting-up of the old land holdings into very small farms decreased production enormously. Coupled with this, the richer farmers sold their surplus grain in the private market rather than submit to the prices fixed by the state. As a result, the agricultural surplus fell, and by 1928 the country was threatened with famine.

In the face of this threat, the party was forced to reverse its position and to speed up the nationalization of agriculture. Although there has been considerable patterning after state industry, most unification has been on the coöperative plan and has taken three forms:

1. In certain instances the land is cultivated in common, but the tools and animals are privately owned. This system is disappearing and is tolerated only as a transition to the artel.

2. The artel is the standard type at present. The land and the tools and animals are held in common, and the peasant must bring all of his equipment into the artel. Wages are fixed and at the end of the year profits are divided. In fact, profits go mostly to capital improvement. The management is elected by the members, but is controlled by the party. The Commissariat of Agriculture, a state organ, is working to bring the system into line with the producers' and consumers' coöperatives and then assimilate it to state industry. With prices and wages fixed, it is clear that in reality agriculture, *in so far as nationalization has occurred*, resembles state industry, and that it will do so in form when the peasant is won away from the land.

3. Another development is the commune, in which dwellings and even working-clothes are held in common.

Methods Used by the Party. The difficulty has been that profiteering farmers, called kulaks, have not wanted to come into the artels. The party has used the most extreme measures against the kulaks. They have been subjected to excessive taxation, and have been denied the privileges of voting and attending schools. The state industries have refused to sell manufactured goods to them. Force and brutality have played their full part. Every effort has been made by the party to stir up hatred and class warfare between the poor peasants and the "exploiters." Finally in December, 1929, Stalin ordered the "liquidation" of some 5,000,000 kulaks. Persecution and exile followed until the middle of 1930, when a lenient policy was adopted because severity and harshness had decreased nationalization. Since then the unification of farms has progressed favorably.

Favoring the Industrial Proletariat. Since the industrial proletariat has been the backbone of the party, it has been necessary to insure its support. Prices, at least until 1930, were fixed so as to favor industry. Wages, practically equalized throughout industry, were lower in agriculture. The system of social insurance has not been extended to agriculture. Although such favoritism exists in order to bring about the conditions necessary for equality, and although inequality exists in many other countries for reasons that seem less noble, the equality sought in Russia is on proletarian terms. Of the 84,000,000 of workers for hire in Russia, only 9,000,000 are proletari-

ans. Much less than half of the latter group are members of the party. This raises a serious question as to whether we may look forward to a classless society or to a permanent dictatorship by the proletariat minority.

THE TECHNIQUE AND OBJECTIVES OF NATIONAL PLANNING IN RUSSIA

The Gosplan. Having described the state system of planning in industry, in trade and banking, and in agriculture, we may now examine the central agency which coördinates the activities of all these groups. This integrating body is the Gosplan, the State Planning Commission. The Gosplan has five divisions: (1) the Social Economic Sector, (2) the Producing Sector, (3) the Reconstruction Sector, (4) the Institute of Economic Research, and (5) the Central Statistical Administration.

The function of the Gosplan is to do for all economic activity exactly what the Supreme Economic Council does for industry. It must plan the relationship of one group to another, the division of income among them, and the expansion or construction that is to take place. The Gosplan has two lines of contact that give it power. First, it is connected with the Gosplans of the seven republics and of the localities. Second, the various People's Commissariats, such as the Commissariat of Trade, the Commissariat of Transport, and the Supreme Economic Council, have representatives on the Gosplan. The State Bank and the three great coöperative systems, producers', consumers', and agricultural, are also represented.

Objectives of the Gosplan. There is no need to state the general objectives of state planning, for they have already been given (page 512 ff.). When the Gosplan has succeeded in putting all economic activity on the same basis as state industry, socialization will be complete. The task of abolishing classes, as we have seen, will still remain.

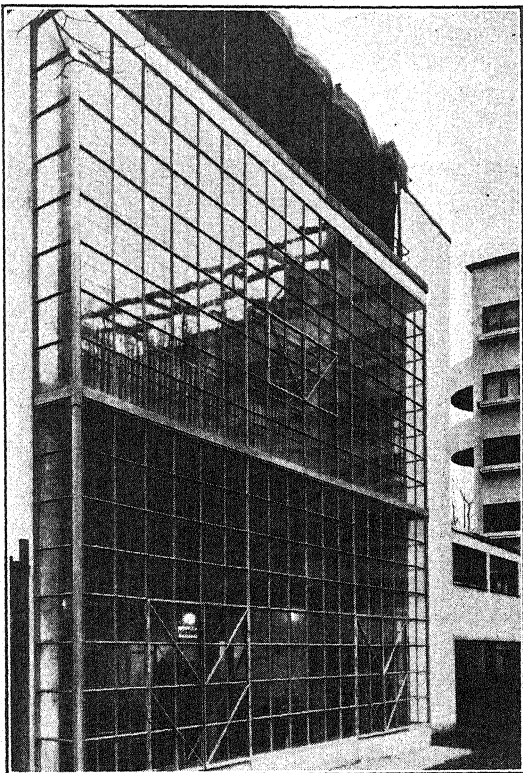
THE RESULTS OF ECONOMIC PLANNING IN RUSSIA

Problems of Production and Organization. The main test of any economic system is the effect it has upon the levels of living of the people under it. In examining our own system we found that two problems are at the heart of economic progress: (1) How can pro-

duction be increased so as to make more goods available? (2) How can we organize the system so as to get the greatest social benefit out of our productive capacity? An answer to the first question has been given in Parts Three to Six. The second has never ceased to baffle us.

Economic Organization in Russia.

Russia has accepted socialism in the form of communism as the answer to the second question, and her greatest efforts so far have been directed toward socialization. The result is at least worthy of serious consideration. With the exception of agriculture a system has been set up which does not seem weak on the organizational side. Activities are coördinated in the public interest. The profit motive has been subordinated to social welfare. There is no difficulty in getting the goods that are produced to the



Kindergarten, Moscow, showing glass walls and open air sleeping porches attached to the apartment house in which employees of the Financial Department live. (A Margaret Bourke-White Photo.)

consumers on a rather equitable basis. Since 1930 there has been little unemployment except as a punitive measure. Accumulated wealth is readily directed toward social welfare.

Production and Levels of Living in Russia. The productive side raises a more difficult question. There is little evidence that produc-

tion in Russia is less than it would be under capitalism. But production is much less than in a capitalistic country such as the United States. This is shown by the fact that levels of living are infinitely lower in Russia than here. It is true, however, that Russia has always been backward economically. The country became industrialized at a very late stage, and there is no likelihood that capitalism in Russia would have caught up with capitalism in the United States by 1934. It is therefore inaccurate to compare socialism in Russia with capitalism in America on the basis of relative productive efficiency in the two countries. But although it is easy to eliminate bad methods of comparisons, it is almost impossible to set up satisfactory ones.

Another difficulty is that Russia has deliberately sacrificed levels of living in order to build up production equipment. That is the essence of the Five Year Plan. The idea is that in the long run levels of living will rise very rapidly when the country is industrialized and has the equipment to produce consumption goods at a fast rate. There is reason to believe that this theory is true. Therefore a study of the production trend in Russia is probably fairer than a study of the trend of levels of living, although in the end the latter test must be applied. So long as we must apply both tests, it is almost impossible to determine how much weight to give to each of them.

Because of these difficulties, all that we can do at present is to examine production trends in Russia and see how they have been affected by the new system.

Five Year Plan and Production. The Five Year Plan to cover the years from 1928-29 to 1932-33 outlined the aims of the party as to the social and economic development of Russia. Some important provisions of the Plan follow:²

1. *Industry.* The gross production of industry is to increase 136 per cent. Electrification is to increase 336 per cent in the output of electrical energy. The production of the means of production (producers' goods) is to rise from 40.3 per cent of total production to 47.8 per cent of the total. The production of consumption goods is to fall from 59.7 per cent of the total to 52.2 per cent. The production increase over prewar figures for the following articles is to be: coal, 259.5 per cent; oil, 233.3 per cent; peat, 1,000 per cent; pig iron, 238.1 per cent; agricultural machinery, 743.3 per cent; superphos-

² The figures cited are from C. B. Hoover, *The Economic Life of Soviet Russia* (Macmillan, 1931), pp. 307-11.

RESULTS OF ECONOMIC PLANNING IN RUSSIA 523

phate, 1,785 per cent; cotton yarn 228.8 per cent; sugar, 201.6 per cent; goloshes, 267.9 per cent.

2. *Agriculture.* Gross production is to increase 55 per cent. The share of the socialized section in the production of grain is to increase 652.4 per cent.

3. *Labor.* Production is to increase 110 per cent. Trained workers are to increase from 41.3 per cent of the total to 62 per cent. Real wages are to increase from 122.5 per cent of the pre-war level to 208.9 per cent.

4. The plan also contains comprehensive provisions for transportation, building construction, state expenditures on social and cultural institutions, improving living-conditions, and abolishing illiteracy.

Degree of Success of the Five Year Plan. If we examine the figures for industrial production, we see the tremendous emphasis placed upon intermediate goods to be used in further production and the

<i>Russia's Planned Economy</i>					
	<i>Actual Output</i>		<i>Quotas</i>		
	<i>1925</i>	<i>1931</i>	<i>1932</i>	<i>1933*</i>	<i>1937</i>
Coal (000 tons).....	17,600	56,000	90,000	75,000	250,000
Oil (000 tons).....	7,200	22,300	35,000	20,800	2½ to 3 times 1932 output
Pig iron (000 tons).....	1,500	4,900	9,000	10,000	22,000
Steel (000 tons).....	2,100	5,300	9,500	10,400	.....
Copper (000 tons).....	12	48.8	100	84.7	To satisfy domestic needs
Electric power (billions kw.-hr.)	2.27	10.6	17	22	100
Cotton cloth (millions meters).	2,030	2,470	3,061	4,700	.....
Sown Area (millions acres).....	265.75	341.5	360	354	400 to 425
National Capital Investment (billions dollars).....	2.7	15.3	19.7	9.8	.....

*October, 1932, to October, 1933; last year of 5-year plan as scheduled in 1927.
Fiscal year now calendar year.

(From *The Business Week*, March 2, 1932.)

lesser stress upon consumption goods. The proposal to increase total output 136 per cent in five years is to be compared with the fact that in the United States during 1922-29 the rate of increase was about 4 per cent a year. Nevertheless the first two years of the Five Year Plan showed that the industrial forecast was not too high, and at the end of the fourth year it was claimed that the industrial part

of it had been completed. It must be remembered, of course, that the high rate of increase was largely due to (1) the low state of industrialism at the starting-point, (2) the importation of machinery and technical aid, (3) the concentration on standard goods, and (4) the exceedingly poor quality of the goods. But the achievement has been such that it would be improper to criticize the Russian system for a poor showing.

The agricultural program has been less ambitious as to production increase, and the success attained, even in terms of the program, has been less noteworthy. But in agriculture the chief problem has been to collectivize the farms as a basic step, and this has been successful far beyond the forecasts of the Five Year Plan.

Wages and standards of living have been very low and have failed completely to fulfill the plan. But unless we know whether the forecast was reasonable or whether it was unreasonably hopeful, we cannot evaluate the significance of a failure to fulfill it. Allowing for the concentration upon heavy industries and the difficulties of measurement, it is too early to measure the success of Russian planning in raising levels of living. On the organization side, then, the Russian experiment has accomplished much that is noteworthy; on the production side it has done well enough to prove to us that we should watch it carefully to see what lessons we might learn from it.

Force and Restraints upon Freedom in Russia. The most severe indictment of the Russian system is the manner in which it was inaugurated and the processes by which it is perpetuated. The evils of the dictatorship by a small minority and some of the tyrannies practiced upon the kulaks have already been described. In addition, about 8,000,000 people—former landlords, bourgeoisie, nobles, Tsarist officers, merchants, and priests—are deprived of civil rights, including the rights to have food-ration cards, to secure coöperative-association cards, to be employed by any state or coöperative association, to attend higher schools, and to get social insurance.

Anyone opposed to the new régime is subjected to severe persecution. Every effort has been made to crush religion, on the ground that it is an enemy of communism. Education and cultural facilities, which should serve to expand the human vision and to give free play to every belief, are used solely to instil the theories of communism. Those who believe that the attainment of liberty through law has

been a signal achievement of civilization are unlikely to be satisfied with a reign of suppression.

The communist theory is that the stern dictatorship of the Communist party is necessary during the transitional period, from which will emerge a society unequalled in freedom and human possibilities. But it is very questionable whether freedom can be won by suppression, or whether a classless society can be brought about by fomenting class warfare.

THE SIGNIFICANCE TO AMERICANS OF THE RUSSIAN PLANNED ECONOMY

Challenge of the Soviet System. So long as levels of living in Russia are much lower than those in America, the Soviet economy will offer no serious challenge to us. Men are not greatly influenced by speculations as to which economic system does more with the materials at its disposal so long as they know that they are living better than the other fellow. But if the levels of living in Russia approach our own, the challenge will be a serious one. For with equal levels of living, the greater economic democracy and equality of the Russian system will make a tremendous appeal to the masses of intelligent men. It is certainly not impossible for the levels of living in Russia to equal ours. The recurrent depressions to which we seem subject may retard our progress. When production has been speeded up in Russia, as it is almost certain to be, the coördinated discipline and enthusiasm of Sovietism is certain to raise levels of living immeasurably.

If we have done nothing in the meantime to remedy the obvious defects in our own system, we shall be subject to real dangers. One danger is that of a sudden change to a socialistic economy, bringing with it all the bloodshed, terror, and suppression which existed in Russia for many years after the revolution there. Or there is the equally real possibility of a series of trade wars or military wars between two world systems of equal power that are fundamentally incompatible. Just as it was impossible for our Union to exist half slave and half free, so it may become impossible for the world to exist half socialistic and half capitalistic. And there are many who believe that capitalism in its nineteenth-century and present form would prove a weaker system than the system being developed by the Soviet Union.

Challenge of the Planning Idea. The real challenge to America does not depend upon what happens to levels of living here and afar. It is rather the challenge of the planning idea. Russia has silenced forever the notion that economic affairs are governed by adamant natural laws. She has demonstrated that men have it in their power to set up the system they want and to make it obedient to their wishes. The idea of laissez faire in Russia seems to be dead.

Our own system has many defects. We need not agree with Russia's philosophy to see that she has proved that society is capable of setting up plans for its own welfare, basing these plans upon the goals it desires and the materials with which it is familiar. With Russia as an example, intelligent people in America will become less and less willing to seek remedies for economic evils in inactivity. They will want to plan and to act. Their plans may range from a mild modification of the existing order to violent revolution. But they will all differ in quality from laissez faire. Some of the possibilities will be considered in the next chapter.

SUMMARY

Socialism involves the public ownership of the means of production and the control of economic activity by society. Communism today has the same goals as Socialism, but differs in that it seeks to attain socialization by means of a dictatorship of the proletariat. In Russia we may observe both, as well as the most complete examples of economic planning.

In Soviet Russia practically all industry is owned by the state or subject to its control. Under such unified control a complete system of economic planning is established to coördinate the activities of the various factories and industries. A similar system regulates both trade and banking. In agriculture, state control is being established as rapidly as the farms can be nationalized. The Gosplan guides and coördinates the activities of industry, agriculture, trade, and banking. The objectives of Soviet planning, which have been fairly well accomplished except in agriculture, are (1) the operation of business in the public interest, (2) the abolition of private profits, and (3) the control of industry and agriculture by the workers.

The organization of the Soviet system seems to have many advantages of efficiency and directness. In production the fairly successful

outcome of the ambitious Five Year Plan indicates great possibilities of increasing the supply of goods. Levels of living have not risen appreciably, but it is too early to determine the significance of this because of the concentrated effort to develop the heavy industries. The decidedly bad feature of the proletariat dictatorship is the suppression of free inquiry and the persecution of dissenting groups and individuals.

The challenge of Russia to America does not lie in the merits of the Soviet system, although they may prove to be considerable. The challenge lies rather in the idea of planning, of purposeful, intelligent control over economic affairs. This, it seems, we must accept as a guide to our economic life to replace the decadent notions of a laissez-faire philosophy.

QUESTIONS AND PROBLEMS

1. Explain the cardinal principles of socialism. How does communism differ from other forms of socialism?
2. How has the Russian experiment contributed to the social sciences?
3. Describe the function of the *combination* in Russian industry. How does the Supreme Economic Council differ from the combination? Describe the complete process of industrial planning in Russia. Do you believe that this sort of planning is possible under capitalism? Give reasons.
4. How do producers' coöperatives (*artels*) differ from state industry? Are they independent of state control?
5. What is the distinction between the technique of social planning and the objectives of social planning? Which do you think must come first? Which came first in Russia?
6. What value do you place upon the incentives to industry in Soviet Russia? Can you suggest still other incentives? Does the social value of an incentive depend entirely upon the quantity and quality of the effort it calls forth?
7. To what extent is Russian industry controlled by the workers? by the proletariat? by the Communist party?
8. Describe the consumers' coöperatives and their relation to state industry. What is the function of the Commissariat of Trade?
9. Explain the function of banking in Soviet Russia.
10. What trends in the nationalization of Russian farming are most prominent? What relation does the agricultural *artel* have to the state? Comment on the methods used to promote the nationalization of the farms.
11. Describe the organization and the functions of the Gosplan.

12. Why is it so difficult to evaluate the effects of Russian socialism upon levels of living?
13. In what ways has the Five Year Plan been most successful? How least successful? Why?
14. Is it proper to determine the merits of socialism (or communism) and capitalism entirely in levels of living, assuming that both have the same materials with which to work? Give reasons.
15. Explain the Russian challenge to America.

Chapter 29

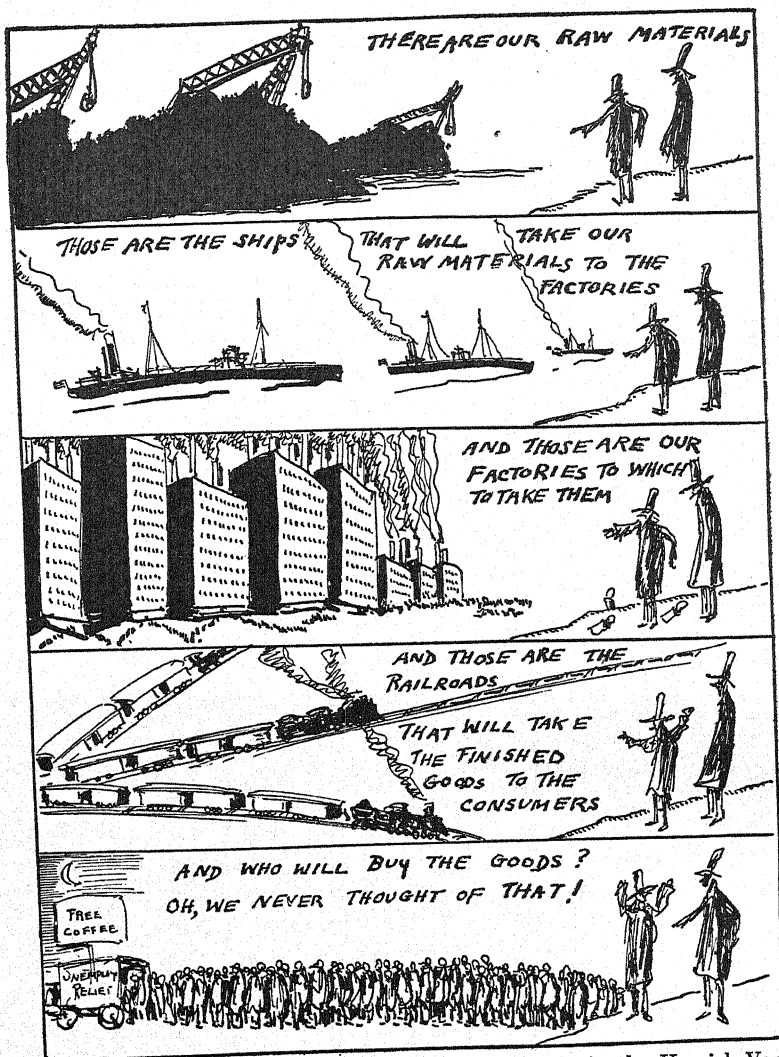
PROPOSALS FOR ECONOMIC PLANNING IN THE UNITED STATES

NATIONAL ECONOMIC PLANNING UNDER COMPLETE PUBLIC OWNERSHIP AND CONTROL

Communist Plan. The communists in the United States desire a system that closely resembles the Russian plan. They hope to attain it by forcefully overthrowing the present system and substituting for it the dictatorship of the proletariat. It is unnecessary, therefore, to expand upon the purposes or methods of the Communist party in America.

Many Americans who are friendly to Russia deplore communist tactics here, since the revolution in Russia was made possible only by the utter collapse of czarism under the strain of war and by the revulsion against centuries of oppression. Such an uprising in the United States would cause infinitely more bloodshed and would be very likely not to succeed in the end. Many critics believe that the result would be a dictatorship of the capitalist supported by the army.

Socialist Program in the United States. The socialist criticism of the existing order is essentially the same as that of the communist, and the type of society desired is not dissimilar. But the socialist hopes to bring about the change he desires by a slow, orderly process. He makes use of present political methods to secure his ends and is willing to serve in legislatures and to coöperate in many ways with capitalists. However, he insists that economic planning is impossible under capitalism, and the central point in his program is



An artist's critique of American capitalism. (A drawing by Henrick Van Loon in *The Survey Graphic*, March, 1932. Used by permission.)

the education of all classes, but primarily workers, in the principles and ideals of socialism.

The Socialist party platform in 1932 put forth the following proposals as immediate steps to hasten the socialization of the country. These proposals illustrate the willingness of socialists to do piecemeal work, and distinguish them from the communists, who maintain that any remedial measures should be spurned because they lull the proletariat into inactivity.

1. *Unemployment and labor legislation.* A federal appropriation of \$5,000,000,000 for immediate relief. A federal appropriation of \$5,000,000,000 for public works and roads, reforestation, slum clearance, and decent homes for workers. The six-hour day and the five-day week without a reduction of wages. Compulsory unemployment insurance. Old-age pensions. Abolition of child labor. Adequate minimum-wage laws.

2. *Social ownership.* Social ownership of mines, forests, oil and power resources, public utilities dealing with light and power, transportation and communication, and all other basic industries. The operation of these socialized industries by boards on which the wage-earners, the consumer, and the technician are adequately represented.

3. *Banking.* Socialization of our credit and currency system and the establishment of a unified banking system.

4. *Taxation.* Steeply increased inheritance taxes and income taxes on higher incomes.

5. *Agriculture.* Reduction of tax burdens. Creation of a federal marketing agency for the purchase and marketing of farm products.

6. *Constitutional changes.* An amendment to the constitution to make constitutional amendments less cumbersome. Abolition of the power of the Supreme Court to pass upon the constitutionality of legislation enacted by Congress.¹

Critique of the Socialist Program. It is not the purpose of this chapter to evaluate the various proposals that it describes, for such an evaluation depends upon the conditions of American life which have been portrayed throughout this volume. If you have understood the analysis of our economic life, you will be able to form a fair opinion of the various plans proposed.

However, one comment upon socialism may be made. It proposes such sweeping changes in law and property rights that it has aroused extreme opposition. If we desire socialization, we must consider

¹ These are not all of the proposals, but merely the most important ones.

the further question: Can it be attained in an orderly way within a reasonable time, or are the communists correct when they say that it can be attained only by force? If we believe that the communists are correct on this point, we are not forced into their camp, but may choose some other plan less radical in character, because we believe it more practical to fulfill reasonably soon. We shall now consider some of the plans that are more moderate than either communism or socialism.

NATIONAL ECONOMIC PLANNING UNDER EXTENSIVE
GOVERNMENT CONTROL OF PRIVATE BUSINESS
COMBINED WITH GOVERNMENT OWNERSHIP

Soule Plan: A National Economic Board. George Soule has presented an interesting plan to control capitalism rather than to abolish it.² He proposes that a National Economic Board be established by law. This board would be composed of engineers, statisticians, economists, and accountants, named by the President of the United States and representing the public interest. It would draw up plans for the economic activities of the nation. The general purpose of the plans would be to direct production to the most efficient plants, to regulate the lower levels of wages and the upper levels of prices, to coördinate various industries and to regulate credit so as to expand or contract particular activities in accordance with the extent of national needs and their social utility.

Industrial Boards. In addition to the National Economic Board, industries would form boards of their own to coördinate voluntarily the activities within each industry. These boards would furnish the national board with basic information, and they would be the instruments through which the national board would work. Thus the National Economic Board would serve to order all economic activity in the public interest, much as the Gosplan does, but the internal affairs of industries would be left to their own devices, provided that they did not violate the national scheme.

Powers of the National Economic Board. The National Economic Board would apply coercion only if advice failed to bear fruit. For example, the leaders of the coal industry might be called together, and the board might say:

² George Soule, *A Planned Society*, Macmillan, 1932.

Your industry is, and has been for years, one of the chief obstacles to a genuine prosperity for the nation. It must be organized to pay higher wages without charging unduly high prices, give steady employment, and offer efficient service. What needs to be done to control your industry and to make it a sound unit in a national economy? We are instructed by Congress to aid you and your experts in formulating a plan of organization for these purposes. We are delegating our own experts to advise you at every stage of your researches and deliberation. We will give you two years to produce a proposal, though we should like one as soon as possible. When your proposal is ready, we will either approve it or disapprove it, having in mind the objectives to be sought. If you do not produce a plan, or do not produce one which we can approve, we are instructed by Congress to make one of our own. If legislation is required, we shall recommend to Congress the measures we approve. After the coal organization is set up, we shall continue to keep in close touch with it, in order to see that the objectives are approached, and in order to correlate your annual plans for wages, employment, production, prices, profits and investment with those of other industries.³

The National Economic Board would really be a public advisory committee to Congress. In certain instances it would suggest government ownership or operation. In all instances it would mark a transition to the complete public control of and planning of business.

Critique of the Soule Plan. The Soule plan tries to combine the planning features of socialism with certain aspects of capitalism. Private businesses would have considerable freedom in seeking profits so long as they did not come into conflict with the national plan. The doubtful point is whether business organized internally on a basis of profit-making is the type of business that can best serve social ends. Is national planning consistent with individualistic businesses? How is the plan to be put into effect? The legal barriers to the sort of control proposed are great. Before the laws could be changed, public sentiment would have to surrender its laissez-faire philosophy and espouse the principles of social control.

Beard Plan: A National Economic Council. Charles A. Beard has offered another system of planning under intensive social control.⁴ Under the Beard plan Congress would establish a National Economic Council whose membership would consist of representatives of all the industries that have reached a high state of concentration. The antitrust acts would be repealed so as to promote consolidation

³ *Op. cit.*, p. 253.

⁴ C. A. Beard, "A 'Five Year Plan' For America," *Forum*, July, 1931.

wherever it is technologically desirable. Agriculture, commerce, and labor would have their spokesmen on the council. The function of the council would be to coördinate the financial, operative, and distributive activities of the various groups.

Board of Strategy and Planning. Associated with the National Economic Council would be a Board of Strategy and Planning, with appropriate divisions, each headed by a production engineer. This board would estimate (1) national needs and (2) the maximum productive capacity of the facilities under its supervision. Following this, productive and distributive activities would be allocated according to the needs of the nation and the capacities of the numerous plants or other agencies represented on the National Economic Council. The central feature of the plan would be not merely to increase production, but to raise steadily the levels of living of the workers by higher wages and lower prices. A constitutional provision would state that all business is "affected with a public interest" and hence is subject to this type of regulation.

Syndicates. Each of the great industries affiliated with the National Economic Council would be a syndicate of affiliated corporations. Professor Beard says:

The Syndicate will have its own board of strategy and planning, geared into the grand Board of the National Economic Council. The Syndicate will consist of divisional or geographical Corporations, or both, as the case may be, and the various plants under each Corporation will be operated by corporation managers. Operating standards and efficiency tests for all plants will be set by Syndicate production engineers, and competitive principles will be established, with National Service Medals and graduated bonuses as rewards for valorous soldiers of the forge and lathe. Since the profits of each Syndicate, as a public utility, are to be limited, such surpluses as may arise will be due mainly to unexpected efficiency, and will be divided into two parts: one to go to bonuses and the other to reserves for contingencies, including unemployment arising from accidents, temporary shut-downs, changes in machinery, crop failures, and depressions, if any.⁵

Agriculture and Marketing. The Beard plan realizes that to bring agriculture under the planned economy will be very difficult. The Syndicate of Agriculture, established under the National Economic Council, would proceed as a public utility to acquire large acreages which cannot be tilled profitably under individualistic farming

⁵ *Ibid.*

methods. These areas would be worked by machinery under special corporations, and individual farmers might enter on special terms just as small manufacturers might join the appropriate industrial corporation. In addition, the Syndicate of Agriculture would spread knowledge about scientific methods of farming and would provide for the coöperative use of machinery in convenient districts.

A Syndicate of Marketing would represent wholesale and retail interests. These interests, including great storage and refrigeration plants, would be integrated under national supervision and would be subject to the rules of the planned economy. Gradually the activities of individual merchants would be curtailed, except those of dealers in specialties and objects of esthetic enjoyment.

Critique of the Beard Plan. In essentials the Beard plan is very similar to the Soule plan. It raises the same problem, not a technical one, which consists in establishing a national outlook favorable to a fully planned economy. A special feature of the plan is its insistence throughout that only staple articles are to be brought under the National Economic Council. Fanciful and esthetic goods are to be produced by unhampered individuals. This provision seeks to avoid a supposed evil of socialism, that is, that socialism tends to excessive standardization and is therefore detrimental to cultural development. However, under a completely planned economy, the ultimate decision as to what goods are luxuries and what luxuries are to be tolerated in the productive system rests with the public will as expressed through the agencies of planning.

DECENTRALIZED PLANNING BY PRIVATE BUSINESSES SUBJECT TO GOVERNMENT SUPERVISION

Swope Plan for Stabilizing Industry. Gerard Swope, president of the General Electric Company, has presented a plan to stabilize industry and employment.⁶ The principal features of the plan, as applied to a single industry, may be summarized as follows:

1. All industrial and commercial companies . . . with 50 or more employees, and doing an interstate business, may form a trade association.

⁶ An address delivered Sept. 16, 1931; in *America Faces the Future*, C. A. Beard, ed. (Houghton Mifflin, 1932). Mr. Swope has a whole volume, *The Swope Plan*, Business Bourse, New York, 1931. In the fall of 1933, Mr. Swope introduced a new plan, basically similar to his original one, but of additional significance because advanced as a proposed substitute for the N.I.R.A.

2. The trade associations may outline trade practices . . . distribute information on the volume of business transacted, inventories of merchandise on hand . . . standardization of products, stabilization of prices, and all matters which may arise from time to time . . .

3. All of the member companies may adopt the plan immediately, but shall be required to do so within three years unless the time is extended by the federal supervisory body.

4. The public interest shall be protected by the supervision of companies and trade associations by the Federal Trade Commission or by . . . some other federal . . . body. *This body is not to be a regulatory or managerial body.* Initiative is to be taken by the associations, and the government agency shall act only as an umpire to prevent unfair competition. The federal body will receive information as to prices, production, consumption, and income. This information will enable the public body to protect the public interest.

5. All of the member companies shall adopt the following plans for the benefit of employees: (a) workmen's compensation, (b) life and disability insurance, (c) pensions, (d) unemployment insurance.

6. Each trade association will form a general board of administration which shall consist of three members appointed by the association, three elected by the employees of the member companies, and three appointed by the federal body to represent the public. This board shall not manage industry. It shall interpret and administer the insurance and pension provisions.

Critique of the Swope Plan. Two provisions of the Swope plan provide for various benefits to employees. In the discussion of the business cycle (Chapter XVI) the possibilities of such benefits were examined and they were found neither to be able to prevent depressions nor able to alleviate the hardships of bad times. It is desirable that business should provide such benefits, but they are not enough. They barely touch the problem of economic planning in the public interest.

The more important part of the Swope plan is the first three provisions, which insist that economic coördination may be achieved by exchanges of information among various businesses in an industry, and that no governmental control is necessary. As we have seen, however, lack of coördination is due to a double set of facts. First, it results from a situation in which one business does not know what another is doing; this would be remedied by the Swope plan. Second, it results from unrestricted profit-seeking even when full information is available. The Swope plan contains no provision that

would raise wages high enough to coördinate production and consumption, that would prevent each member from wanting to capture a greater share of the market, that would direct industry toward the production of socially useful rather than merely profitable goods, that would prevent the withholding of goods whenever it is profitable to withhold them, or that would coördinate the rewards to and the activities of different industries.

The Swope plan provides merely for *open* combinations. But even in *closed* combinations, where the objectives of the Swope plan have been completely realized, there is frequently a failure to serve the public interest when there is no public regulation. The Swope plan is a plea for *laissez faire*. Government must not regulate! It must only collect statistics and "advise," thus showing how more profits can be made.

United States Chamber of Commerce Plan. The United States Chamber of Commerce favors a National Economic Council to aid business in planning. This council would not be a government agency, but would be composed of from three to five men selected from a larger group of business, governmental, and professional interests. The work of the council would be purely advisory. It would gather information and make studies on important economic questions for the general guidance of business. The plan suffers from the weaknesses of the Swope plan.

The Chamber of Commerce plan also proposes modification of the antitrust laws in order that industrial agreements to curtail production may be valid whenever they are sanctioned by the proper federal agency. Under this proposal ratification depends upon government conceptions of public welfare, but initiation rests with private businesses concerned with making profits. This is not economic planning in the public interest.

La Follette Plan. In 1931 Senator Robert M. La Follette introduced into Congress a bill to create a National Economic Council of fifteen men selected by the President, and selected from trade associations and organizations. This council would formulate proposals for the solution of economic problems and would make a report every year. Its powers would be advisory only.

The whole question of economic planning has been obscured by the attention devoted to this sort of organizational scheme. An advisory council might guess, but it could not plan; and the differ-

ence between guessing and planning is the difference between laissez faire and social control. At the same time, beginnings are made in small ways, and the results are generally obscure. Any agency for gathering pertinent facts about our economic life is likely to serve a useful purpose.

THE EXTENT OF ECONOMIC PLANNING IN THE UNITED STATES

Experimental Legislation of 1933. The special session of Congress called by President Roosevelt in 1933 passed a large volume of legislation involving new methods of dealing with economic problems. Among these laws, as we have seen, were the Agricultural Adjustment Act and the Emergency Farm Mortgage Act, the Home Owners' Loan Act, the Banking Act and the Securities Act, the National Employment System Act, the Tennessee Valley Authority Act, the Reforestation Act, and the Public Works Section of the National Industrial Recovery Act. We have seen that these measures, important though they are as evidence of the trend of events, are not intended to transform our competitive economy into a planned economy. A comprehensive approach to economic planning, however, is found in the industrial-control section of the National Industrial Recovery Act.

National Industrial Recovery Act. The first objective of the N.I.R.A. is to promote industrial coördination by means of trade agreements. As we have seen, one of the causes for the business cycle is that business men work at cross purposes. The new law permits members of any trade or industry to formulate a code of fair competition, including a list of the practices and methods which, in the judgment of business men, will be most likely to establish industrial order and restore employment. The list may provide for exchange of information, standardization of products, simplification of processes, and a wide variety of other features. It may prohibit price-cutting or other practices deemed to be destructive to industrial harmony. When such a code gains the approval of the President of the United States, it becomes binding upon the entire trade or industry, and action in compliance with its terms is exempted from the provisions of the antitrust laws.

No code may be approved by the President until its advocates

prove to his satisfaction that their group is truly representative of the trade or industry for which it speaks, and that it imposes no unfair restriction upon membership. It must be proved also that the code will neither tend to promote monopoly nor discriminate against the small business man and the consumer. Thus an attempt is made to guard against the misuse of united strength.

Provisions are inserted for the protection and welfare of labor. Each code must contain recognition of the right of collective bargaining and a prohibition of the anti-union or "yellow-dog" contract. It must contain a schedule of maximum hours of labor and minimum rates of pay assented to by employer and employee, and approved by the President.

Industry is given every opportunity to draw up its own codes. But if any industry will not or cannot do so, the President is authorized, after proper investigation, to promulgate a code that will have the same effects as one arrived at voluntarily. Or the President may prescribe a limited code dealing only with hours of labor, rates of pay, and other conditions of employment.

Finally, the law has enforcement sections. Violation of a code in any transaction in or affecting interstate commerce is made a violation of the Federal Trade Commission Act, and the United States district courts are empowered to prevent and restrain such violations. A fine of \$500 for each day of violation is imposed. In extreme cases the President may resort to a licensing system and exclude from the channels of interstate commerce those who are not complying with the provisions of the law.

The National Industrial Recovery Act is an emergency measure to terminate at the end of two years, or sooner if the President proclaims that the national economic crisis is over.

Critique of the National Industrial Recovery Act. The worth of the Act may be tested partially by examining it in relation to the problems of coördinating industry. In so far as lack of coördination is due to concealment of information and typical trade practices by unscrupulous minorities, the act is likely to serve a useful function. But for the evil that the most economical utilization of industrial capacities for the welfare of the people as a whole is inconsistent with private profit-seeking, the act attempts no remedy.

Successful economic planning involves the encouragement of industrial development along socially useful lines, based on the recog-

nition that the social utility of an industry cannot always be determined by its ability to yield private profits. Thus planning involves public participation through government in the distribution of capital among industries, by means of taxation, regulation of profits, and in various other ways. Aside from the public-works program, the N.I.R.A. does not attempt these.

The partial suspension of the antitrust laws is not unlikely to promote the further concentration of the control of wealth. It remains to be seen whether governmental supervision of the type provided for in the N.I.R.A. will make for a more equitable sharing of the gains which may result from intensifying coöperation among business men.

The wage provisions of the act have great possibilities. But the law does not provide any standards for setting a minimum wage. Administrative determination of this important matter means that the result of the law will depend upon the social objectives of the administrators. It is one thing to set a minimum wage which provides a subsistence level of living. It is quite another thing to fix wages with a view to coördinating production and consumption. And both of these fall far short of attempts to distribute income in the manner likely to bring the finest results to the people as a whole.

The National Industrial Recovery Act provides mechanisms for social control, but the fruitful exercise of control depends upon the ideals of the people in whose hands it lies. We have not a plan, but rather opportunities to plan. How we utilize these opportunities depends upon the extent to which we discard laissez faire and embark upon policies of social control. It is a great mistake to regard recent legislation as in itself economic planning. For if it is so regarded and then this legislation fails, many people would consider the planning idea a mistake, without raising the pertinent preliminary question as to whether planning had been tried.

Coördination of National Agencies. The effective use of the opportunities for planning created by the various acts of 1933 depends partly upon the ability of the Government to coördinate the various acts and make them supplement one another. For this purpose a council has been set up, composed of the President and his cabinet, and in addition the Director of the Budget, the chairman of the Reconstruction Finance Corporation, the administrator of the N.I.R.A., the administrator of the Agricultural Adjustment Act, the governor

of the Farm Credit Administration, the chairman of the Home Loan Corporation, the Federal Relief Administrator, the chairman of the Tennessee Valley Authority, the Federal Railroad coordinator, and the director of the Civilian Conservation Corps.

THE ISSUES BEHIND ECONOMIC PLANNING,
AND THE EXPERIMENTAL ATTITUDE

Need for Economic Planning. As we approach the end of this book we may say that it has presented one great issue: How can we raise levels of living in the United States? For thousands of years man had to struggle hard to wrest a precarious livelihood from Mother Earth. Today in the United States, although it is easy to produce goods, poverty and suffering exist on a tremendous scale. Our task is to mold our social and economic environment so as to reap the largest possible rewards.

The objectives are clear. The methods to follow are not so apparent. But we cannot sit and wait. We must act, and we cannot act without planning. To act in the public interest, we must plan on a national scale. To put national plans into effect, we set up social controls. These two processes constitute economic planning.

Technical Obstacles to Economic Planning. For many years the technical task of devising plans for regulating our complex economic interests was too difficult to attempt. But today we know that this is no longer true, for Russia has shown that planning is practicable. Thinkers in our own land, too, have advanced plans which do not seem utopian dreams.

In fact, the United States has already worked out difficult technical plans. To transform an unarmed, peaceful nation into a fighting unit capable of sending 3,000,000 fully equipped soldiers across the sea was a stupendous task. It involved mobilizing all the resources of the nation for the purposes of winning the war. In times of peace, gigantic single industries with thousands of units scattered all over the land are whipped into a smoothly functioning body. For many years the Government has handled the mails efficiently and there is no reason to suppose that other enterprises would be more difficult. The more complex our society becomes—the more difficult problems of management are—the more unreasoning it is to leave the matter entirely to thousands of individuals working at cross purposes.

Social Ideals That Prevent Economic Planning. The real obstacle to economic planning is the set of ideals that we have carried over from an early day and which developed to fit a totally different economic situation. We continue to think in terms of individualism and competitive profit-seeking long after the conditions favorable to that economic philosophy have passed away. In undertaking economic planning, we need not accept any particular plan or any specific set of objectives; we need rather to set out in the scientific spirit to solve our pressing economic problems.

Experimental Attitude. The solution of the problems of our economic life can be found only through maintaining an experimental attitude toward those problems, and through accepting a suggested solution for them only *if it works*. The kind of experimentation that has contributed so greatly to the development of such natural sciences as physics and chemistry is extremely difficult, if not impossible, to apply with human society. But if agencies and arrangements in industrial life are looked upon as *means to an end*, that is, as *instruments*, then experiments are possible. For when we look upon agencies and social arrangements as means rather than as ends in themselves, we think of their use as temporary, and of them as only agencies for attaining the ends we have in mind.

Obstacles to the Experimental Attitude. The difficulty in attaining the experimental habit of mind toward social or economic arrangements arises largely from a confusion of ends with means and from an emotional attachment to the instruments of social life. An illustration of such feeling is the unreasoning, almost hysterical, attachment of certain Americans to the Constitution. An experimental attitude would conceive of the Constitution as an instrument prepared to meet the needs of the American people and would want the document revised as changes made revision desirable. A refusal to consider revising the Constitution as conditions and ideas change might result in a rising pressure of popular indignation that would explode with terrific force and with disastrous social consequences to all the people of the United States. In a similar way many people are unreasonably attached to the protective tariff, to the gold standard, to labor unions, or to individual bargaining between employers and employees. A person with an experimental attitude asks, "What are the goals?" and, "What are the proper means to reach the goals?" He accepts all the instruments of social life that he believes will help attain the desired goals.

Concept of Change. In order to have an experimental attitude in economics it is only necessary to consider all economic arrangements as experiments. Today our whole economic structure is undergoing such rapid changes that a hardening of economic institutions would be dangerous. Flexibility, a continuing attitude of questioning, is the most difficult of all attitudes to maintain; but progress can come only if we submit our arrangements to constant revision. To use a possibly absurd but clarifying illustration, suppose we all became deeply attached to the use of coal and to our system of arrangements for mining and delivering it—and then suppose all the coal were used up! We should then be left entirely without fuel. It is scarcely less foolish for us to have such an attachment to the open shop or to the closed shop, to capitalism or to socialism, or to any other similar institution or idea.

Purpose of This Book. This book has been planned to develop and express an experimental attitude. We have never meant to be dogmatic, but only to be helpful. We have not attempted to present problems so as to close the argument, but only to open it more widely for thoughtful consideration. If this book has helped to develop an experimental attitude, if it has clarified the nature of our economic life, and has awakened an intelligent interest in and focused attention on the key problems of American economic society, it has served its purpose.

SUMMARY

Complete economic planning is possible only when there is public ownership and control of the means of production. In the United States the communists seek to achieve this objective by a revolution engineered by the proletariat. The socialists, although desiring the same type of society, are willing to work gradually for its orderly attainment. In the meantime they propose considerable labor legislation, the socialization of primary industries and of banking, high taxation of wealth, and revision of the Constitution.

The second group of proposals for economic planning suggest (1) government ownership of many industries and (2) a government agency with power to fix production, prices, credit, and wages so as to coördinate private economic activity in the public interest. Under such planning the Government would operate through a series of voluntary boards or syndicates at the head of each industrial, com-

mercial, and agricultural group. These proposals seek to exercise a leveling effect upon incomes and to stabilize economic affairs, at the same time allowing scope for private initiative within the various groups.

The third group of proposals suggests economic planning by allowing all the businesses within an industry to plan, coöperate, and combine, with a government agency serving in an advisory capacity and sometimes possessing veto power. This type of planning does not touch the central problem of subordinating the profit motive to social welfare. It is likely to result in an increasing concentration of power within a private industry, which will make genuine economic planning and social control even more necessary than it is today.

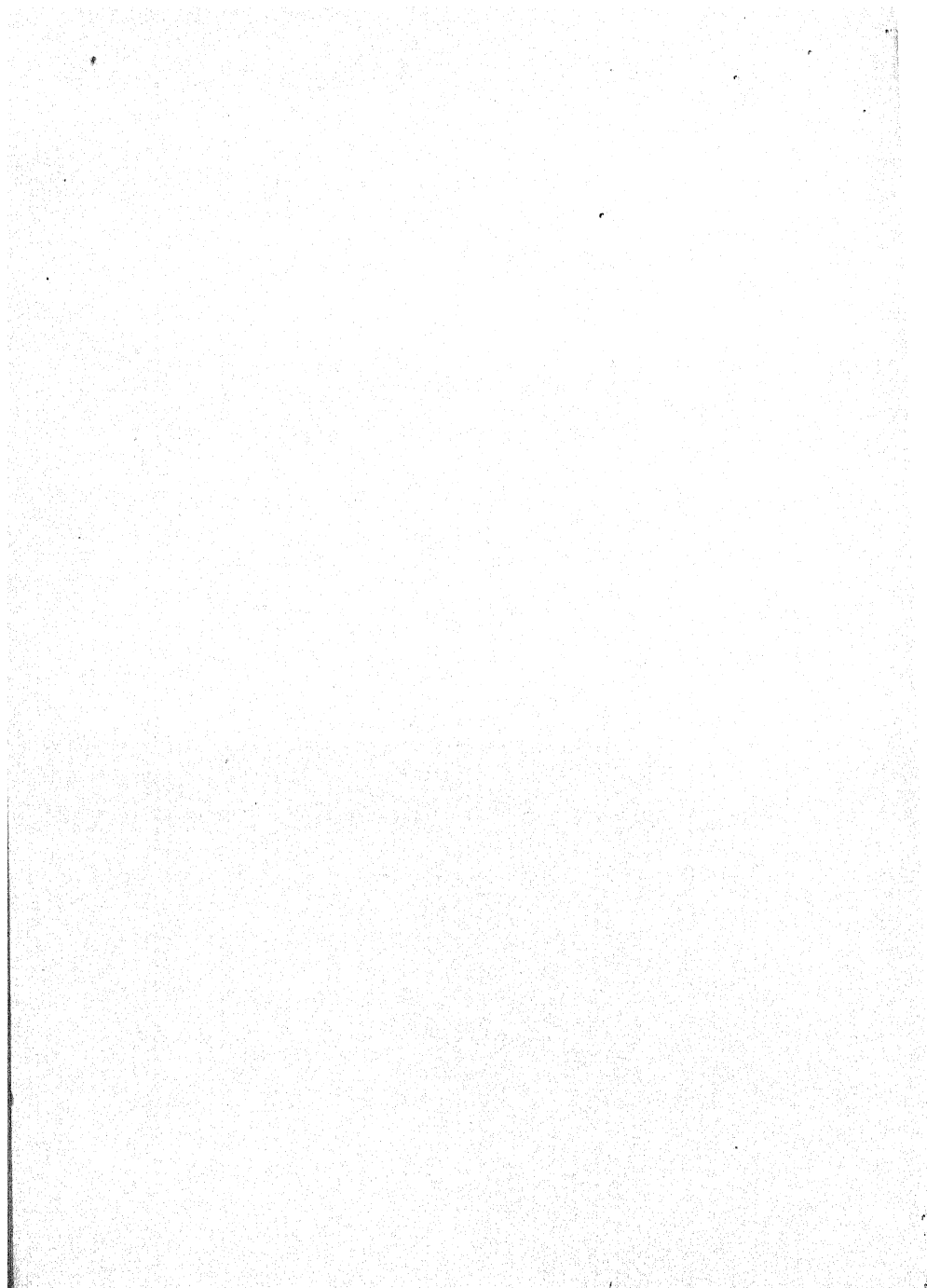
The experiments commenced in 1933 in the United States are worth-while beginnings. They are not economic planning, but they afford new opportunities for working out plans.

The need for planning lies in the inability of a laissez-faire system to cope with the problems of modern industrialism. The technical difficulties of planning can be removed. The chief handicap to overcome is our allegiance to ideals that belong to an earlier industrial setting. In place of adhering to blind traditionalism we should develop an open-minded experimental attitude toward social and economic institutions and problems.

QUESTIONS AND PROBLEMS

1. Which of the specific provisions in the Socialist party platform are not incompatible with capitalism? Why?
2. How does the Soule plan differ from the Russian planned economy? Is the difference chiefly in objectives, in form, or in methods?
3. How could the Soule plan be put into effect in the United States?
4. Point out vague elements in the Soule plan. Would it be possible for such a plan to be complete before it is put into effect? Can it be put into effect before it is complete? Explain.
5. Are there any essential differences between the Beard plan and the Soule plan? If so, point them out.
6. Is the Swope plan for stabilizing industry satisfactory? Is it possible to determine that it is unsatisfactory before it has been tried? Find out whether any plans similar to the Swope plan have been tried.
7. What services can a government agency render when it has only advisory power? Mention benefits that might come from the Chamber of Commerce plan.

8. Do you consider economic planning necessary? Do you know of any objections to economic planning?
9. Discuss the provisions of the National Industrial Recovery Act and the relation of the act to economic planning.
10. *Subject for debate: Resolved*, That economic planning is possible under capitalism.
11. Mention technical obstacles to economic planning that have not been overcome by the Russian experiment.
12. Why do social ideals change more slowly than economic conditions?
13. Is insistence upon planning consistent with the experimental attitude? How do we know that there is not something better than planning?
14. Which part of this book interested you most? Which part did you find the most useful?



Glossary

absentee ownership. Ownership by one who does not participate in management.

acceptance corporation. A corporation division created to perform the banking function of extending credit to customers of the corporation.

Agricultural Revolution. The sweeping changes in the character and size of land holdings, and in methods of farm production, which occurred during the sixteenth and seventeenth centuries.

balance of trade. The relationship between a country's exports and imports.

bank. An institution whose chief functions are lending, borrowing, investing, and caring for money.

barter. The direct exchange of one commodity for another.

bears. The popular name for traders on the security market who try to make prices go *down*.

bimetallism. The use by a country of two metals at a given ratio (for example 16 to 1) as the basis of its money system.

blacklist. A boycott by employers of workers—usually labor leaders—whom the employers regard as objectionable.

blue-sky law. A law to protect investors from unsound stocks.

bond. An interest-bearing certificate of indebtedness, usually of a corporation.

boycott. Refusal by a group to deal with any person or organization that has aroused its hostility.

broker. A dealer in money, stocks, bills of exchange, and the like.

budget. An estimate of expenses and income, usually made once a year, in order to establish equivalence between the two.

bullion. Gold and silver considered as metal.

bulls. The popular name for traders on the security market who try to make prices go *up*.

capital. Anything produced by work when used for further production; wealth used to produce wealth.

charter. An instrument in writing, given by a government, guaranteeing certain rights, franchises, or privileges and frequently imposing certain limitations.

class struggle. Usually, the struggle between capitalists and workers.

clearing-house. An institution to settle differences in accounts.

- closed combination.** A combination of separate business or industrial organizations by turning over the stock to a central control called a trust.
- closed shop.** An enterprise where employment is denied to a certain class, either union members or nonunion members.
- collateral.** A pledge of documents representing property, as security for the payment of a debt.
- comfort.** The level of living allowing all the physical and some of the social necessities.
- communism.** A form of socialism whose theory is that the goal must be reached by means of violent class struggle.
- company stores and towns.** Maintained by a company for the use of its employees, who are sometimes forced to use them.
- compensated dollar.** A dollar of fixed purchasing power and variable metallic content, instead of vice versa.
- competition.** The attempt of two or more persons or firms to capture the same market, whether for goods, money, or services.
- consumption.** The use of goods in the satisfying of human wants.
- corporation.** A legal person created by the state for purposes stated in the corporation's charter.
- cost accounting.** A method of keeping accounts to show clearly profit or loss.
- craft.** A manual art.
- credit.** Securing goods or services at one time and paying for them at a later time.
- currency inflation.** The issue of currency (money in circulation) above the amount guaranteed by a reserve (bullion held in the treasury).
- debenture.** A paper acknowledging a debt.
- demand.** Desire plus ability and willingness to buy at the stated price.
- depression.** A period of lowered economic activity.
- discount.** A deduction. To loan for a restricted period at less than the usual rate of interest.
- dividend.** Money or stock distributed, usually as profit on shares of stock in a corporation; the amount due an individual as his share of profits.
- domestic system of industry.** Industrial work done in the home, financed by outside management.
- economic goods.** Goods of which the supply is limited.
- economics.** The social science that deals with man's efforts to satisfy his wants.
- Engel's law.** An economic law formulated by a German economist as follows:
As the family income increases, the proportion spent for necessities decreases, and vice versa.
- entrepreneur.** The person or group that starts and conducts an enterprise.

executives. Those directly concerned with carrying plans into effect.
exports. Goods shipped out of a country.

Federal Reserve system. The system established in 1913 to provide a flexible and fluid currency.

foreign exchange. A clearing-house for international trade.

franchise. A privilege granted by a government to an individual or a company to do certain things under given conditions.

free goods. Goods provided by nature in unlimited quantity.

free trade. Trade without such restrictions as tariffs.

future. A purchase on sale calling for the delivery of the commodity, stocks, or bonds at some future time.

gild. An association or organization of persons engaged in the same occupation for mutual protection and aid.

gold points. The points at which gold will move into or out of a market.

gold standard. The acceptance of gold as the basis of currency, guaranteed by a sufficient gold reserve held in the national treasury.

Gosplan. The State Planning Commission in Soviet Russia.

Gresham's law. The tendency of bad or cheap money to drive out of circulation an equal amount of good or dear money.

gross. The total amount, without any deductions.

health insurance. In industry, insuring the worker some income during illness. Usually employer and worker share the expense of providing it, and sometimes the state has a part.

imports. Goods shipped into a country.

inclosures. In medieval times, the uniting of separate strips of land.

income, national. The total amount of money received by the inhabitants of a country.

income tax. A tax by government levied on all incomes above a stated amount. A *graduated* income tax increases the levy on amounts above stated sums—a *surtax*.

index numbers. A statistical device by which trends, tendencies, and changes can be measured or determined. Index numbers are *weighted* when the items are valued according to their importance.

individualism. The theory that individual rights are preëminent—no interference by government.

Industrial Revolution. The change in industry from the domestic system caused by the introduction of machinery (in England) in the late eighteenth and early nineteenth century.

injunction. An order by a court forbidding or requiring a certain act.

interest. Money paid for the use of money.

investment. To convert money into some other form of wealth, as by acquiring part or all of a business.

investment trust. Banks concentrating in the placement of the stocks and bonds of business enterprises.

jobber. A dealer in single lots of commodities.

labor. Human energy used in production.

laissez faire. Let alone; keep hands off; freedom from interference by government regulation.

land. Anything provided by nature useful for man in production or consumption.

lockout. The closing of a plant by the employer in order to force his employees to accept the wages and conditions of labor that he lays down.

log-rolling. Agreement by one in political place to assist another in return for the latter's assistance.

malingering. Loafing on a job on pretense of incapacity.

Malthusian law. The tendency of population to increase faster than the means of subsistence.

manor. In medieval times, the holding of a lord with freehold (tenure for life) tenants.

margin, buying on. Depositing with a broker only a percentage of the purchase price of securities.

marginal unit. The least-wanted unit in a series of identical units.

mercantilism. The theory that the economic strength of a nation depends on its store of bullion.

merger. The combination into one of two or more organizations or institutions.

middleman. Any dealer between the producer and the consumer.

minimum wage. The lowest wage that can legally be paid.

money. Any medium of exchange authorized by government as a legal tender for the payment of debts.

monometallism. The use by a country of only one kind of metal as the basis of its money system.

monopoly. Unusual control over supply or demand.

mortgage. A conveyance of property (usually real estate), upon conditions, as security for a debt (loan).

navigation act. An act regulating navigation, usually in order to foster the commerce of the country enacting it.

net. The amount remaining after the deduction of all charges, outlay, loss et cetera.

normal price. The price about which the market price moves up and down.
N.R.A. Initials of the National Industrial Recovery Administration established in 1933 under N.I.R.A. (the National Industrial Recovery Act).

old-age pensions. Pensions for old people sometimes provided voluntarily by employers and sometimes required of them by law, or provided by the state.

open combination. Separate businesses or industries bound by agreements as to trade practices, et cetera—a trade agreement.

open shop. A shop open to all workers, both union and nonunion, although the open-shop employer usually prefers the latter.

overhead. The general necessary expenses of a business, such as salaries and maintenance cost.

over-production. The production of more goods than the market will absorb.

par. Face value, that is, worth what it says it is worth.

partnership. An association founded on a contract between two or more persons to combine their money and labor (either or both of them) in an enterprise, and to share the profits and bear the losses as the contract provides.

personnel. The body of persons employed.

picketing. An attempt by strikers and their sympathizers to induce workers and customers not to deal with an employer by walking back and forth, usually with banners, before the employer's plant.

police power. The inherent power of a government to provide for the general welfare.

pork barrel. Public funds regarded as available for local improvements not needed for the general good.

poverty. The lowest level at which people can continue to live.

price. Value expressed in terms of money.

priority. A first right.

processor. One who carries on some form of manufacture.

production. The process of increasing the utility, or want-satisfying, power of commodities.

profits. The excess of returns over expenditure.

proletariat. The wage-earning class, in the narrower sense usually employed workers in industry.

promoter. One who starts the process of organizing a company, marketing stocks and bonds, et cetera.

protective tariff. A tariff enacted to protect domestic producers.

public utility. A business or industry which the law has recognized to be "affected with a public interest."

raw material. Any product of nature in its natural state.

real wages. A worker's income in terms of what his money wages will buy.

rediscount. To transfer a discounted loan at a lesser interest than that received on the loan.

riches. The level of living that provides more than necessities and comforts.

scarcity. Insufficiency of commodities to satisfy or meet all human wants.

scientific management. A technique of organizing an enterprise for the purpose of best utilizing the efforts of employers and employees through processes resting upon scientific investigation and analysis.

securities. Evidences of property or debts.

single tax. A tax to be levied on one object alone as the sole source of public revenue; in Henry George's use, a single tax on land.

sinking fund. A certain sum regularly set aside by a debtor for the payment of the principal of a debt.

socialism. Ownership and control by society of the means of producing wealth.

speculation. Dealing with a view to profit by expected fluctuations in price rather than from the earnings of business or industry.

spreading work. Employing more workers for fewer hours.

stability. Unchangeableness of value.

staggering work. Beginning work for different workers at different hours or on different days.

stock, certificate of. A document representing ownership in a corporation.

stockjobber. An intermediary between brokers; in England, a stock broker.

stock-watering. Issuing more stock than an enterprise is worth.

strike. The stopping of work by agreement by a group of employees in order to enforce their demands upon an employer.

supply. The quantity of a commodity offered for exchange at a given time and price.

tariff. In the United States a tax levied on goods coming into the country.

tax. A charge, usually in the form of money, imposed by a government.

trade agreement. See *open combination*.

trust. See *closed combination*.

under-consumption. The consumption of less than the consumers need or desire, for lack of purchasing power.

unemployment insurance. Insuring the worker against periods of unemployment without pay, the cost usually borne by employers, employees, and perhaps the state.

union label. Use of a small emblem upon products made in a union or closed shop by union labor.

usury. Formerly, any interest on debts; now, excessive interest.

utility. The power of a commodity or service to satisfy a human want.

value. Power in exchange.

value-in-use. The same as *utility*.

wealth. All material goods that have utility, or want-satisfying power, and are scarce, or limited in quantity.

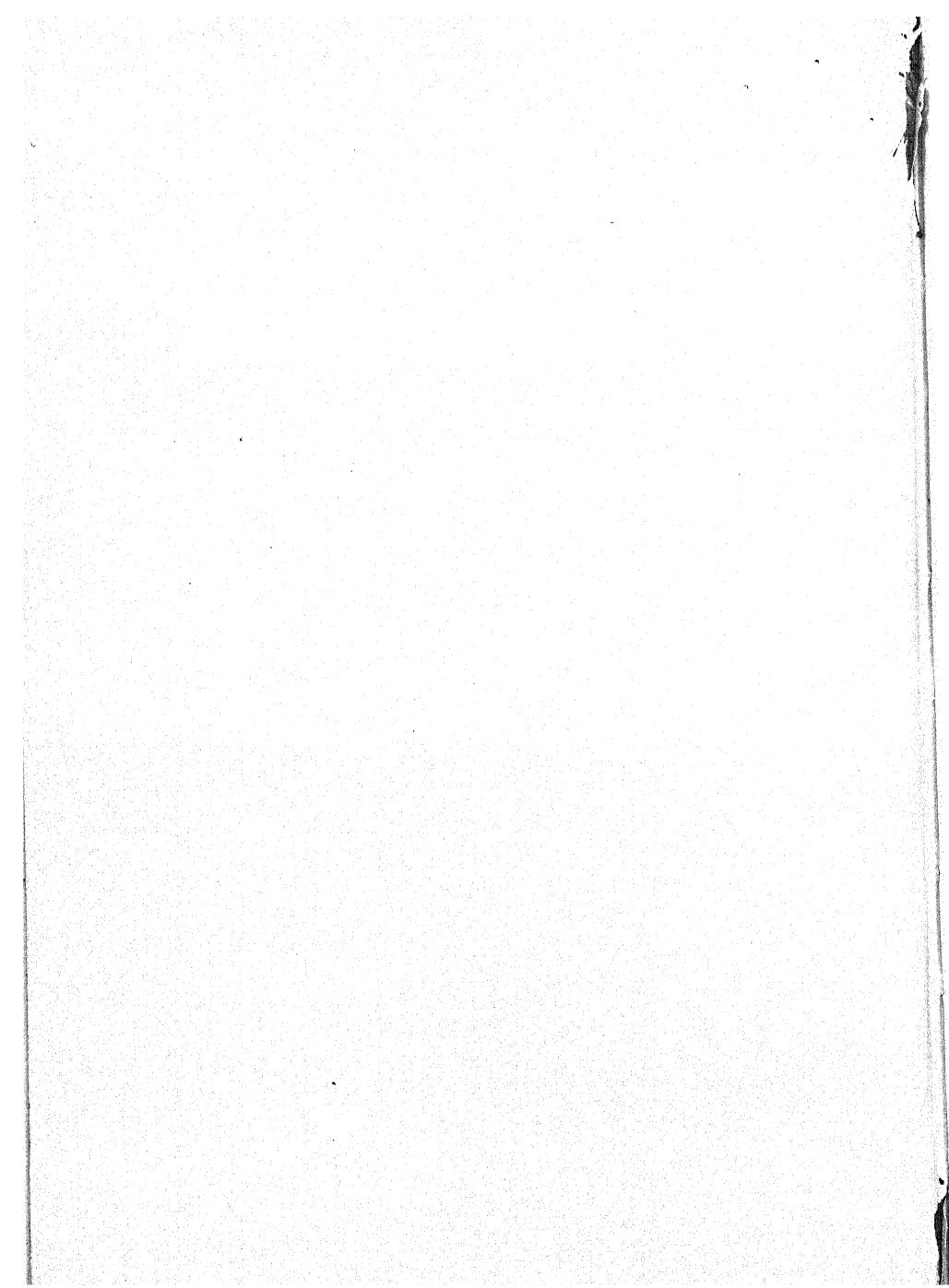
white-collar worker. Workers not engaged in manual labor, such as clerks and salespeople.

wildcat. Unsound.

workmen's compensation laws. Laws that require employers, usually through insurance, to pay their employees for injuries sustained in the course of employment.

yellow-dog contract. A contract in which an employee promises his employer to join no labor organization while in his employment.

yield. The proportionate rate which the income from an investment bears to the cost of the investment.



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